

THE ROLE OF OPERATING RISKS IN INTERRELATION WITH THE EDUCATION FOR SUSTAINABLE DEVELOPMENT

Ye. G. Torosyan

European Regional Educational Academy, Yerevan, Armenia, yevatorosyan@yahoo.com

Abstract: *The risks of the modern society provide the basis for the process of decision-making also in the field of education. The importance of risk regulation systems, it is necessary to analyse the ways the public is engaged in education system related with environmental study processes. Interrelation between risks and the education for sustainable development should be considered for educational system in Armenia.*

The sustainable development under the conditions of risk society today is quite extensively investigated. According to the studies conducted all over the world for the evaluation of ecological awareness in many developed and developing countries the level of awareness of the issues of environmental protection, as well as the perception of ecological risks has been growing gradually during the last ten years. In Armenia there are no many data available regarding ecological awareness of the population and the perception of ecological risks.

The main global problem is sustainable development, that main part is protection of an environment. The influence of the human factor or anthropogenous influence on an environment becomes the basic part in problem of protection of an environment. Necessity of for education for steady development here is shown, as necessities for modern educational system, is especial in higher education. It is necessary to note, that the education for sustainable development is an educational novelty, which continues the successful introduction in global educational system.

Ecological education and education for sustainable development are in close interrelation. The education for sustainable development not only is closely connected to ecological education, and also occurred from it. The bases of education for sustainable development assume reception of fundamental knowledge on natural sciences, understanding for inter discipline connections and global processes, modern practical researches with application of new and newest devices and apparatus,

In the present paper the attempts of introduction of ecological education in higher education system in Armenia with close interrelation with education for sustainable development are resulted.

Keywords: *The risks , the sustainable development, Ecological education,*

1. Introduction

Globalization and industrial development of the states create fast changes in an environment and opportunity of occurrence of new principles for definition of tasks of a society. Moreover, growth of the extreme climatic phenomena create sharp situation on a global scale.

In the present paper the idea develops that in above mentioned circumstances there is a necessity of complete spiritual and physical formation of a human individual for an

environment. This can reach by development of complex educational system. In this aspect the special value is received with development of all forms of education in interrelation with ecological thinking of the pupils.

2. The higher education system in former soviet countries

The modern period of development of Armenia (after the collapse of the Soviet system) especially difficultly proceeds in education – the major mechanism social

and cultural heritage. The role of education system is defined in a present stage of development of Armenia by the tasks of its transition to democratic and lawful state, to market economy. It will enable to overcome backlog of the country in economic and social development. The purpose of education varies from narrow professionalism education and development of the person. It changes the representation about the forms of university training, about a nature of knowledge, place and role of teachers and another considerably.

One of the important reasons of long crisis in economy on a post the Soviet space is the fall of a level and ability to a competition at a global level of education system. The Soviet educational system had been considered as the best in the world under many factors. At 1960 - 70 years for USSR characteristic became growing demand for higher education. And is not casual, that the students went here not only from the Socialist Countries and Third World, but also from many West countries. It was considered, that the high level of education system was one of few factors, which allowed to be proud to the Soviet system. The level of education system have allowed USSR also to be one of super-countries.

However system of education, as well as much another events in former USSR, was beginning to hand over to a position at the end of 80-s'. At the first, the quantity of higher schools so has increased, the government, in generally Communist Party, decided that more higher education means more social mobility. In this case the state assignation on higher education were not ripening behind growing costs for the system of higher education developed in logic of the centralized planned economy. The most part of the budget left on the salary, the consequence that arose deficiency of means on service, purchase of the literature for libraries, equipment. Moreover, the instability of teaching structure was increased in the beginning of 1990 years, when many of

professors have begun to change sphere of the activity.

One of other reasons was, that the state began interested less for education qualifications and on the foreground was put forward reception of the diploma, piece of a paper. Especially, the managing elite has made all for his generation for reception not only the diploma of higher education, but also even of a doctor's degree and professorial rank. As the present directly working persons in the field of higher education system, we would like to note, that this tendency remains unfortunately, moreover on our sight prospers. Other reasons here are latent, and most important, that some of present leaders have passed on this ways.

The opportunity of Soviet system democratization has appeared also in education. Alongside with it there was a necessity of integration with the international system of education. The processes of integration have begun to develop in many directions, that has appeared useful to a developing of educational process on more modern level. For Armenia by this major factor is also maintenance of activity of educational institutions in abroad for the Armenians, with the purpose of preservation of the Armenian nationality. Though this question was decided and in the Soviet time, but it carried more political character. And moreover question on self-management of higher schools has risen. More financial independence for universities means less state control.

Since 90 years the post-Soviet system of higher education began to reformer the administration and management structure and revised the curricula, accepted the internationally adopted 2 or 3-level model of University education. The difficulties have begun here, as many of institution send by copying by Western, most of all of American system of higher education, instead of the changes have connected from the substantial party of his educational process.

There were two basic models of higher education in the World practice.

1. The orientation of preparation of the experts, professionals was characteristic for the German school. Here student studied all for mastering by the necessary sum of knowledge, skills and skills.
2. Other, liberal model, assumed the importance of development of the person.

The Soviet system basing on the first model mainly has gone on a way of revealing of the educational purposes, definition of the contents and principles of organization of educational process. It carried out the order of the state assuming mass manufacture of the experts for system. It also has entered into the contradiction with volume of the information and increased quantity of disciplines. There was a characteristic individualization of education with the minimal set of disciplines for the present time, with study of bases of scientific knowledge, preparation of the expert of a narrow structure within the framework of the advanced branch development of manufacture.

It was began with a definite risk factor in former socialism countries the organization of private education, originally in higher education system was. At 1990 some of communist rulers countries was embracing private education. The east European countries as Poland, Romania with demand for higher education growing began to make buildings and rooms for private universities. Now there is hundred thousands students are learning in private universities, which provide more high level of education and opportunities for realization of educational process, than official bodies.

The same took place and in the Asian countries. For example, Malaysia so successfully has applied system of private universities, students of such educational institutions surpass now in quantity of the students of public institutes. The last, for example, have lavished funds on Malay and

Islamic Studies departments for nationalist reasons, despite little demand for their graduates. Such situation was also in former USSR, when many persons studied at Party Higher Schools on ideological bases. Moreover, there it had aspired the persons, who basically did not differ in other educational institutions and went for reception " communist " of higher education. All of them were basis for higher level employers not for Party only, but also as State and Government rulers. In our opinion given graduates made faster the collapse of the Soviet system.

The post-Soviet system of education also have begun to occur private higher educational institutions in the same time, which are taking place outside of a field of scheduled system of the state. The state began to provide an opportunity of training in state and private educational institutions. It should become the form of realization of principles of market economy in social and spiritual spheres of life of a society. One of the first became of the, largest private educational institution of Armenia, one of best on former USSR.

The private education system has revealed new opportunities of all system education and stimulated development of its not budget forms and inside state higher institutions. The chiefs of these universities are guided on market, inquiries of the employers.

3. Ecological Education Sustainable development courses

During changes there is a necessity of introduction of subjects, completely new to our higher school, - educational disciplines of the increased level for the purposes of post-graduated education.

Now we shall consider what new educational programs such are entered in educational space former USSR, in particular, which are directly connected to democratic trends anywhere and everywhere. Moreover, a major direction program is convergention. Nowadays different higher schools carry out various educational modules and disciplines,

specialists under the all-European circuits. It promotes also movement of the teachers and students on Europe, promotes attraction of a labor in the European market of work. In this paper we represent two programs according to our scientific interests.

In a modern society there are all preconditions to promote education of the person. Thus it is necessary to take into account integrity spiritual and physical formation of the individual in a natural environment. For this it can reach by development of ecological thinking. In this aspect the special value is received with development of ecological education. With this purpose in many private high schools, including at university Hrachya Acharyan, general ecological formation education of the students widely takes root. Moreover at university all is done for development of ecological thinking of the students not of humanitarian directions.

The importance of ecological education is marked also Law of Republic Armenia " About ecological education and formation " from November 20, 2001. There it is marked, that the ecological education is continuous process directed to the person with the purpose of its orientation in an environment and nature of use.

Globalization and development of post-industrial countries with his problems result in sharp and fast changes in a society and to occurrence of new principles in definition of tasks of a community.

The main global problem is a sustainable development. The basic making of sustainable development is a environmental protection. The influence of Human amplifies on an environment, anthropogenic factor becomes as principal. At the international level, the developed nations must be prepared to provide help to the Third World if sustainable development is to be successful.

Education for sustainable development is a dynamic concept that utilizes all aspects of public awareness, education and training to

create or enhance an understanding of the linkages among the issues of sustainable development and to develop the knowledge, skills, perspectives and values which will empower people of all ages to assume responsibility for creating and enjoying a sustainable future.

The realization of principles of ecological policy and its program purposes requires the wide and organized actions in the field of the education. The similar approach should provide to the nearest future specialists in wide involving in process of product realization, in creative process of making the new goods and the end prosperity in modern life. The modern approach to sustainable development is increasingly multi-faced, with a need to integrate a wide range of elements. It has become people centred with local strategies being developed to meet local problems, for example, as education.

The urgency of ecological-educational programs is caused by a place of chemical manufactures in modern life. Today commodity nomenclature of chemicals consists more than of thousands. Thus many from received target and collateral substances represent danger for industrial personals, for consumers and in generally for environment.

The aim of this program is training the students of the last course in BA level of Chemical technologies and Engineering ecology Department of SEUA. This type of course will ensure and create conditions for perception of scientific and technical achievement by the students not only in narrow local space, but also in wider geographical, global scale. The global scale it is a level of the international community, that is connected to development of the international institutes and documents accepted by them.

The priority of ecological imperative will promote an orientation in a choice of possible directions turning in a major condition socially ecological policy. On

the other hand, it is known that if the company or other economical organization invests in knowledge, which increase productivity of investments of the physical or human capital or raises a common level of participation of the businessman, the gain of productivity conducts an achievable due to this to growth of economy as a whole.

The beginning of 21 centuries has shown that the Mankind leaves on a new coil of challenges and uncertainties. The growth of the extreme weather phenomena all over the world precisely testifies. That the change of a climate is not the skeptical forecast and the reality. This call requires resolute measures. The realization of ideas and projects can made at taking into consideration of balance between requirements present and vital prospects of the future. The stability of human development is something greater the continuation of ecological policy by different means. It is strategy of modernization in which to cover huge innovation potential for economy, environment and society.

The students of the Chemical technology and environmental engineering department of SEUA pass some of ecological disciplines: General ecology, Engineering ecology, Microbiology and Microbial growth, Toxicology, Air Pollution and Control, Water quality, Waste water treatment, Solid waste disposal, Monitoring. The students, the future experts in the field of chemical technologies - basic organic synthesis, electrochemical manufactures, manufacture of a glass an silicates, the biotechnology and pharmacy, should be acquaint with the newest ecologically pure technologies, with reorientation on sharp reduction of resources and pollution of an environment. The students should understand that with limiting care it is necessary to carry out industrialization. The criterion of SD is considered such economic attitude to an environment and natural ecosystem that allows keeping

them within the limits of economic capacity.

The given course will allow acquainting the future specialists with global problems facing by mankind in the 21-th century. It will present to the students of the tendency of change of an environment on a global scale. Acquaintance with principles of SD will allow the future engineers to take possession of methods of management, scientific, technical and economic levels connected with researches in the field of protection of an environment and feedback, and also with legal-political norms in researched area. A rate propose also acquaintance of the young experts with the circumstance of Republic Armenia before a world public in the field of protection of an environment with organizations of different levels responsible in the sanction of the above mentioned tasks.

The realization of the program on study of a course < Sustainable development > provides with the pedagogical staff having wide experience of activity in social sphere regularly engaged in scientific and pedagogical activity. The lectures of proposed discipline have a scientific degree also.

Effective means for solving the task of SD program has become: science and methods of seminars and conferences, holding discussions, issuing of specialized literature on SD, collections of scientific themes end method developments for ecological, political, economical and low problems. book popularizing science and explaining the surrounding world. For to days of Armenian educational system the most important thing is mass and accessible educational technologies and techniques, able to solve the problem of joining the students to social intellectual potential.

The basic preparation of the program provides with access of each student to library funds and databases. It is necessary to organize the student's visits in special libraries of the foreign representations in RA, firms, factories. The realization of practical employment at the modern enterprises succeeded in realization of

the programs of environmental protection is supposed.

There are supposed also acquaintances of students with the practice work of National Assembly and Constitutional Court of RA, with the practice work of government agencies that are responsible for organization and sanction of questions in sphere of Human development and Environmental protection.

The passage of a course should be accompanied by display of the didactic materials - the pictures, tables, video films, clips and others.

Education for sustainable development has two major thrusts.

- Promotion and improvement of Basic Education: The quality of basic education must improve to focus on imparting knowledge, skills, values and perspectives throughout a lifetime that encourage and support citizens to lead sustainable lives.

- Reorienting Existing Education Programs: Rethinking and revising education to include more principles, knowledge, skills, perspectives and values related to sustainability in each of the three realms – social, environmental, and economic – is important to our current and future societies. This should be done in a holistic and interdisciplinary manner. The best chance of success of education for sustainable development lies not in a separate program but in embedding its vision within other initiatives.

Conclusions

The traditional predisposition of Armenians to education as the integral part of our mentality is not crossed out by complexities of life, and on the contrary, gives itself to know every time, when in it there is a public need. The problems of education excite all society. The Armenian citizens of should receive such knowledge, which are necessary not only today, but also for a future. For small and rather poor natural resources of Armenia is important the development of high

technologies, for which are necessary the competent experts.

The final purpose of spent reforms in sphere of higher education – is became of such system, which would allow the country to be entered in a new social and economic context of development of the country. On the schedule of day a number of reforms with definition of the status of establishments of higher education, which should receive the large autonomy in view of the requirements of the market. The role of the state should change considerably. The state should become the original chief of educational policy. It should trace processes proceeding in a society and education, to coordinate an efforts, to carry out an estimation and accreditation, to render to universities information services. More far-reaching reforms are needed. Central control of higher education stops universities from competing for the best students, professors. Professors and other higher education system employees had been paid by performance. The universities should be run like industrial companies, that mean it`s necessary the competition among the educational organizations. For example, American universities are fiercely competitive. They struggle for talented staff and students, for donations and results. “ Fund-raising efforts at the best-organized universities start even students have graduated. STAR PROFESSORS ATTRACT STAR SALARIES”.

For small republic as Armenia there we need no more universities, here we need a competitive edge, when better universities may be essential. The influence of state for higher education system should be hade same for state and for private universities. It`s not be forgotten, that Government and Ministry responsible for educational program, for license and accreditation and not more.

The realization of reforms should pass not by copying of this or that system. For example, praising American system nor is deprived of defects, is not flawless - “ The diversity which makes the system so dynamic also leaves it vulnerable to abuse.

In the humanities, intellectual fashion seems bizarrely distant from the real world. Many bad ideas – notably political correctness – started life as American campus fads. And budget pressures squeeze the system when times are tough. This year, the axe has fallen hard on California's public universities. Yet for all that, the numbers going into American higher education continue to rise, and the average tuition fee in an American university is around \$4,500—some \$1,000 less than the proposed maximum to be charged in England. Fees in the California state system, even after two steep recent rises compelled by leaner budgets, are less than \$3,000, and a third of the income from them goes into grants for students

who cannot afford even that” / *The Economist*, Print edition, Jan, 22nd 2004/.

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