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EDUCATION + INNOVATION = QUALITY

Evolution of an education system can be characterized by various parameters, in particular – educational standards, technologies, etc. However, education as the important social institute sensitively reacts to public progress and its changes. Therefore, transition to market conditions in USSR national economy and subsequent disintegration of USSR have left an indelible print on an education system of the CIS countries. Economic reforms were spent without due preparation and quickly. It has led to discharge of the state from many spheres of ability to live of a society. This fact, in turn, has generated crisis both in economic and social spheres. Lack of financing became the constant satellite of an education system. Each country has selected the own way of an output from the given situation.

Belarus and Russia are one, the allied state. Therefore, our consideration to be limited only to these countries. They have chosen different strategy of a survival for education systems. The president of the International academy of sciences of the higher school and all-Russian public organization “Academy of sciences of the higher school of Russia”, professor V.E. Shukshunov in its report has noted economic and is narrow-private character of modernization of the Russian education systems spent up to 2004. Come then changes in its carrying out have resulted in the following: in Russia the share of rector is more senior than 60 years has decreased to 35%, increase in cumulative charges at education more than 5% from gross national product, informatization of educational establishments of all levels, etc.

However, despite of above conditions one can observe occurrence and successful functioning of new educational technologies in Russia as a result of realization of various Russian and international programs during already more than ten years. Smooth transition to market economy in Belarus has led its education system to stagnation. Yes, there are small islands of successful realizations for some modern educational technologies. However, the full-scale serial educational systems or modules are absent. It is no wonder, that president A.G. Lukashenko on the first congress of the Belarus scientists has emphasized the following fact as absence of due return feedback from a science. The latter is the important component of educational system.

The given concern concerning quality of education and efficiency of educational reforms is undoubtedly generated by existing market relations. They dictate high requirements to a level of preparation and quality of the specialist. One of its estimations is educational standards. Their role and functions are widely investigated in the world. The motive power of this phenomenon is objective process of internationalization of higher education. Also it is necessary to note that this
process has mass character and variety of forms and levels of educational institutions. Creation of
uniform educational space of higher education becomes essential business of the world community.
"Bologna process" is one of steps in the given direction, often mentioned in the literature.

Essentially new conditions demand the adequate control system directed on the decision of
both internal and external problems. For example, the organization of interaction of a national
education system with other world. The key role in this process is allocated to the distributed
information technologies. The answer to such calls of 21st centuries became declaration in the
CIS countries of the slogan about an innovative way of development.

In education it is possible to consider change of an educational paradigm as the basic
innovation. The transition from “formation for all life” to “formation through all life” enters the
"competence" model of preparation of the specialist. The last demands the organization of
innovative model of education instead of “knowledge" model. If last model characterizes the
student as object of training influences the first assumes self-development trained on the basis of
information technologies. In the literature there is also a mention about the person-focused
model. It puts personal individuality in the base of consideration. Each of these models has own
source of construction of the educational standard.

For realization of the “competence" model of the certain speciality it is necessary to
describe professional requirements (skill, knowledge and experience are the competence), needs
of employers and a cultural level of the social order from a society as the current educational
standard of this speciality. This standard can serve in such kind as means of realization of
principles of the state educational policy, well as the tool of programming of a necessary
educational level.

If each managing object will place an order on some specialists necessary in future with
the certain skills and for the corresponding price then it is possible to receive the generalized
structure of the specialist detailed on territory and other parameters. The additional account of
the educational standard of existing specialities with the registered actual expenditures of labour
will give a clear picture of specialists necessary for training, including the faculty. The described
algorithm of construction of educational standards already can be considered as innovative
educational technology.

However, for increase quality of education of it a little. It is necessary to discuss
technology of processing of greater volumes of the educational information for improvement of
quality of education. The object of our consideration is the information system of the Ministry of
Education of the Republic of Belarus as the state body making the decision in sphere of
education.

It is known, that almost all educational information is formed at a local level (in higher
educational institutions) and then is already flown down in the Ministries of Education of the
Republic of Belarus. Therefore in it or more precisely in its information system it is necessary to
create root structures and replicated patterns for high educational institutions on which the
above-stated information will be uniformly formed and extend. It should concern, at least, to all
accounting educational information. Owing to standardization of representation of the
information in educational systems it will be possible to solve in a on-line mode problems of
certification, definition of a rating or quality of formation of concrete high educational
institutions.

The Internet naturally acts as technological base of uniform national information
educational space. Only it has all necessary qualities as universality, distribution and
interactivity. Also for the above-stated problems XML platform looks as natural application. The
principle of branch of the maintenance from the representation, inherent in language XML
allows to create structures of documents in XSD-schemes and to store them, for example, in
repositories of the Ministry of Education of the Republic of Belarus.

Thus, the algorithm of construction of educational standards, technology of creation of model
of information system for the Ministry of Education of the Republic of Belarus for the successful
analysis of a current condition and designing of a new educational level are discussed in the
given work.