

NON-STATE SECTOR AS HIGHER EDUCATION SYSTEM ELEMENT IN PERIOD OF RUSSIAN SOCIETY TRANSFORMATION

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The reforming of the educational system (and especially higher education) in the country goes hand in hand with socioeconomic and socio-political processes in the society. It means that in the reforming course the measures are necessary providing the higher educational institutions (HEI) functioning business mechanism evolutionary change in accord with the society's socioeconomic life reconstruction general design. The reforming content of the Russian higher school, progressively acting as an educational industry at the present time, is its entry into exchange relations.

The higher education reconstruction in conditions of market system needs a theoretically substantiated strategy of development and functioning of all the spheres of higher school activity, those connected with the educational process financing among them. The commercialization in the context of education represents the alteration of functioning of higher educational institutions as exchange relations subjects for the purpose of their adaptation to a new social and economical system, work simplification with due consideration of market principles including the achievement of supply-and-demand equilibrium, enhancement of the services, which could conform to the changing consumer needs.

The new Russian realia require specialists armed with new knowledge (lawyers, managers, sociologists, psychologists), but the post-Soviet state system of education could not satisfy the "order" of the society to the full extent due to its "ingeneerization". The given contradiction turned to be one of its main causes of becoming of the network of private higher education institutions, which became the subject of discussions both from the position of terminology and more extended problems: legality of education serviceability development and commercialization of higher school.

Another precondition for the non-state sector development was the problem of state educational institutions financing. In the middle of 90-s of the XX century the business function of state higher educational institutions was relatively divided into a budgetary, supposing only state financing; non-trading, in which the emphasis was made upon the HEI's own resources and the call for funds of other (extra-budgetary) financing resources; and combined one, which supposed the use of both budgetary (state) funds and attracted ones. The problem of budgetary financing was rather urgent, as the state funds given for financing education practically hadn't been in-

creased for a long enough period, often even the accepted part of expenditures wasn't realized, saying nothing of an additional financing.

But the policy of non-state education in conditions of self-financing was being formed by economic laws, where the main mechanism controlling the HEI's life was market educational relations, wherein the demand determines the supply of educational services, its variability, the sold product quality and socioeconomic guarantees. Both student and his parents and the society as a whole appear as the consumer, the subject of educational relations.

The non-state HEIs' life foundation, according to the member of the Non-state HEIs' Association Council of the Russian Federation Pruss N.M., is quality in its all manifestations: it is, first of all, the quality of knowledge got by students in a HEI and that of the educational process, the HEI's culture within the system of moral-ethic and social values and priorities; second, it is the quality of the faculty, education programs, their mobility and flexibility, the reliability and federal status of educational documents, the socioeconomic guarantees, which the consumer acquires after graduating from a HEI, need to be referred here as well.

At the evident necessity of the private sector development the problem of negative attitude of a part of the population towards to private HEIs stands out. It is explained by the fact that a range of the opened HEIs begin working without a license for educational activities, the educational programs of these HEIs do not conform to the national educational standard, the main target of the activities is the generation of profit and not the quality of the given education.

Among other problems of the non-state higher education becoming and development one can detach:

- the academic activity staffing (there are cases, when persons, the basic education of who doesn't correspond to the taught disciplines, are engaged in teaching);
- the financing (a minimum volume of the establisher's financial or material means is not provided at the creation or reorganization of a non-state educational institution for the purpose of the HEI's financial stability guarantee);
- the problem of place and socio-cultural role of private education in the sphere of higher education is not investigated enough.

Thus, nowadays in the sphere of education there appeared a necessity to develop a new national policy based on the conception of the non-state education not as an incidental or alternative to the state one phenomenon, but as quite a correct reaction to the new interests and needs emerged in the society and conditioned by the life itself. The non-state education, protecting the interests of various social groups, is becoming a special object of the national educational policy.

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**UNDERDETERMINED MODEL
TECHNOLOGY FOR MANUFACTURING AND
ECONOMIC SYSTEMS MODELING**

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One of the main problems in the manufacturing and economic computer models development is incomplete and underdetermined data. The capabilities of the modern modeling tools are limited by the possibilities of traditional mathematical apparatus. The qualitative new level of modeling can be achieved by using intellectual information technologies. The web-based system for manufacturing and economic systems modeling was developed by the authors. It is based on the underdetermined models technology (developed in Russian Research Institute of Artificial Intelligence).

Many limitations of the traditional modeling approach are removed. A problem is represented in the form of a model (not an algorithm), in this case using of underdetermined data is possible, there are no inputs and outputs, it is easy to solve inverse problems.

The base technologies of this computer system are the underdetermined models technology, Web-technologies and the virtual reality technology (for the visualization of computation results). The integration of underdetermined models and Web-technologies ensures multi-user remote access to the computational core of the system, processing and saving information on the server, and also using accessible data from the Web and the integration with other software. After the registration in the system user can start developing, exploring and computing of models via Internet (Intranet). The system gives an opportunity for collaborative working with complex models. Users can develop some parts of a complex model, which then associates these parts together.

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