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## REFLECTIONS ON FURTHER VOCATIONAL TRAINING DEVELOPMENT

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The radical reformation of educational system is the problem of vital necessity. This reformation must be started in comprehensive school and have its continuation in higher education and further vocational training. However, it should be launched only after different (not innovative but quite different) educational programmes and standards – the fundamentals of the whole educational system – have been carried out. Moreover, elaboration of educational programmes and standards should be realized not only in fundamental-academic paradigm, but also in research paradigm of all types and levels of education existing in our educational system nowadays.

Vocational training is the top of a mountain, the foot of which is deeply rooted in comprehensive school and even in early childhood. Compensatory training does not lead to the apperance of educational system integrity. Simple addition of new links to the existing ones without qualitative change in forms and content doesn't bring the features of continuity to the existing educational practice, doesn't settle the arising contradictions.

The All – Union Congress of educators gathered in Moscow, December, 1988 stated a general task: to recomprehend the target functions of education as a system, to formulate the tasks of its separate stages and links, to revise traditional notions concerning the social essence of education, its correlation with other types and forms of social practice, its role and place in the life of a human being and the society. The educational project named "The Conception Of Continuous Education" was offered to the participants of the Congress. The Conception pointed out that arising

approaches of understanding the essence of continuous education are rather contradictive. In some cases these approaches are identified with mechanical training which is understood as the mechanical unification of all stages of educational process in order to ovrecome the contradictions and deadlocks in education itself; in other cases it is considered sufficient to add extra links to the existing system. Thus it is necessary to change the direction.

Inspite of the fact that twenty years have passed since the introduction of the Conception Of Continuous Education (1989) into practice, it has not lost its urgency, scientific novelty and theoretical significance.

Pedagogical institutes nowadays are teaching students using the information of the end of the XIX beginning of the XX centuries. Educational institutions of primary, secondary and higher professional education (technical schools, technical colleges, higher educational institutions) train specialists, aware of the new technologies of the XX - XXI centuries. It is clear that most comprehensive school graduates are not able to cope with the sophisticated curricula. That is why higher educational institutions have to hold extra entrance examinations to reveal students' skills and abilities. It is urgent to eliminate this interruption of youth education in our country. Professors must avoid such words like "Now, forget everything you've been taught at school at once. We'll teach you other things and in the other way" when welcoming the freshers. To begin with, it is necessary to change the teaching staff at comprehensive schools: a researher in physics should give lectures on physics, a researher in chemistry should give lectures on chemistry, a philologist should teach literature and a linguist should teach languages. The core subjects should be taught by researchers not by a tutor on the basis of "Physics" or "Chemistry" textbooks. Textbooks are for students, not for teachers.

At the same time vocational training institutions should develop personally-oriented paradigm of teaching using the advanced teaching technique. Mainly highly-qualified specialists having composed their own course of studies should teach students. In this case a technical school graduate could say "I've been taught by a Master" and a college graduate could say "I've listened to the course of a famous researcher"

Professional skills of vocational training institutions graduates constantly lag behind scientific-technical progress development. In order to avoid this the graduates must be able not only to work on their speciality, but also to learn, to develop in their professional activity, that is not only to possess knowledge – to possess abilities to acquire new knowledge, to maintain more and more sophisticated social and professional functions on the demanded level, to be competent.

The Conception points out that urgent needs of social development demand changes in the approaches to in-service training, vocational training and refreshing courses of specialists engaged in different branches of the national economy as one of the most flexible link in the system of continuous education.

The educators engaged in vocational training are working over the solutions of these tasks. They work hard to meet the demands of labour market teaching the specialists who will be needed not only today but in future, competative in modern professional qualities.

Further vocational training was born and is developing vocational training not because of the instructions of the authorities, but due to offers and requests of the masses below: from owners, heads of enterprises and organizations or from labourers themselves. As a result, further vocational training through in-service training courses and refreshing courses has provided labourers an opportunity to participate on modern markets of production and service realized according to scientifically-based technologies. Scientifically-based technologies mean, first of all, scientifically-oriented labourers. Thus, it is quite necessary to develop theoretical basis. Unfortunately, Russian researchers do not pay enough attention to further vocational training.

To provide objective components of continuous education and to achieve successful realization of new educational programmes we should develop new educational programmes at comprehensive schools. These educational programmes should have multiprofile trend both in cultural education of future citizens of our society and in strictly specialized educational programmes intended for training specialists for certain branches of national economy. Elaboration of new school educational programmes of general education must be based, in its turn, on the scientific research of general vocational training. Working out the new educational programmes of general vocational training must be based on scientific research on further vocational training educational experience. Elaboration of educational programmes of further vocational training must be based on scientific research on labour market demands in present and in future. In our opinion, realization of educational programmes elaborated in such a way could provide the continuous character of education and the succession of the educational programmes in our country.

Educational programmes of further vocational training (carried out in training centres) in the 1980s were subdivided into several types: intensive courses, refreshing courses, in-service training course, sandwich courses and target-oriented ones.

Intensive training – that is a course in which a lot of material is covered in a short time – was the most demanded because a lot of labourers had neither training at any vocational institution nor a certificate of vocational training. The demand for vocational

training even more increased at the beginning of the 1990s when following the enterprise closedown in textile and agriculture, staff reduction in many industrial branches, staff reduction in the army and navy, appearance of a great number of migrants – gave rise to the motivation to get a certificate of vocational training in the shortest time and to return to work again. For all that, the quality of such education was not up to a mark.

By the end of the 1990s the demand for vocational training (that is, for the simplest and fast receiving a certificate of vocational training) slowed down. For what reasons? First, it turned out that the content of vocational training syllabi did not satisfy the professional level of industrial technologies, for example, fourth-class turner could not work on his speciality because his professional – qualitative characteristics did not correlate to any job. As well as the fourth-class crane operator could not find a crane corresponding to the fourth-class. The same situation had formed in the most specialities and professions. Besides, scientifictechnical progress, influenced by the market, improved the level of technological development in our country. Perhaps, only non-state educational institutions of further vocational training got a chance to elaborate, consider, approve and co-ordinate vocational training educational programmes in accordance with modern demands of industrial labour market meant for higher grade (with higher complexity of qualification, machines, equipment, materials and advanced technologies).

As the acceleration of the socio-economical and scientific-technical progress grows the demand for advanced and sophisticated technologies increases as well as the scale and significance of staff retraining; first, on advanced and novel directions of science, technique and technologies development, second, on maintenance, adjustment and repair of new generations of versatile facilities, machines and equipment.

The main centres in the specialists training and retraining system should be as follows:

- a) specialized educational structures (mainly, higher educational institutions and technical colleges), their branches and faculties;
  - b) target-oriented training centres;
  - c) parallel centres of continuous education;
- d) different extra structures of social, informal, initiative forms of general and vocational training.

The special survey conducted by the Institute of World Economy and International Relationship showed that the present market economy makes new demands to labourers what requires the levelling of the general system of education, raising the level of both teaching and intellectual skills.

On 20 December,2007 the final session of the Public Chamber Committee devoted to the questions nation's intellectual potential was held in the State University-Higher School of Economics. The members of the Committee submitted the paper "Education"

and the society – is Russia eager to invest in its future?" Some of the conclusions were as follows:

- the content of the education is outdated. It lags behind both life requirements and achievements of science and technology;
- the low salary of teachers leads to low motivation;
- the structure of vocational training does not vocational trainingcorrelate either with current or perspective labour market demands.

Here we could add: we don't need workers, technicians or engineers training today. There is no division of labour at the present-day manufacture nowadays. All what we need is the continuous training of the whole professional structure of specialists with different levels of professional development, different levels of activity and of personal professionalism, of self-efficiency realization possessing equal rights and responsibilities to work in different spheres of economy as specialist-technologists or specialist-managers.

However, neither comprehensive nor vocational school should influence personal world outlook. The school should assist in obtaining knowledge, developing competence corresponding to the scientifictechnical progress level.

These thoughts are not novel. The quotation from Lev Tolstoi's work "Upbringing and Education" can prove it. "School must have one purpose – transmit instructions and knowledge without transition into the moral sphere of convictions, beliefs and character; its purpose is only the science itself, but not the results of its influence on the personality. School mustn't consider any science or even the code of sciences to be necessary, but must transmit the knowledge it possesses giving students the right either to apprehend it or not. The school structure and programme mustn't base on theoretical ideas, or on convictions of necessity of these or those sciences, but on the single possibility science – on teachers' knowledge."

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## MODEL OF THE INTEGRATED EDUCATIONAL SYSTEM «SPECIALIST SCHOOL - TECHNICAL COLLEGE»

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One of the top issues for school leavers in Russia is the choice of a future profession and educational institution. According to some researchers (S.S. Kravtsov, A.N. Leibovich et al), the most available form of vocational guidance is a specialist schools program, aimed at differentiation and individualiza-

tion of education. Continuity of education is important at all its stages and levels. Putting an integrated model of a multidisciplinary school based on network learning, into educational practice could help achieve this objective. Schools with technical specialism could follow the example of the «specialist school - technical college» system, used by the Association of the Izhevsk University Complex and the Izhevsk State Technical University (ISTU). The main advantage of this system, compared with normal schools in the network, is an organic link between general education schools and institutions of primary, middle, higher professional and additional education. The principles of the system are:

- *Social orientation* (taking into account social needs and development of scientific ideology);
- *Linking theory to practice* (choosing future profession with due regard for the current demand for labor);
- upbringing character of education (career counseling in order to develop a balanced personality, uniting civil, labor, moral, aesthetic and physical education);
- polytechnical character (career counseling in cooperation with polytechnical education, acquaintance of students with the basics of modern production);
- accessibility and informed choice (school students can familiarize themselves with a wide range of professions, learn the psycho-physiological requirements of different professions, study options, chances for professional growth and etc., in order to make a conscious choice of the profession);
- systematic character and continuity (introduction of vocational guidance at school, starting from the 1<sup>st</sup> grade, under condition of continuity of this work throughout the school years);
- multidimensionality (complexity) (career counseling is aimed at preparing a student for a good choice of a profession: in civil, social and economical, psychological and educational, medical and physiological, and professional aspects);
- taking into account age and individual characteristics (gradual professional self-determination of schoolchildren, according to their age and personal traits: professional interests, inclinations and abilities);
- cooperation of school, family, employers and public organizations (all involved sides have a common approach to vocational guidance);
- *self-determination* (final choice of a profession is made by a schoolchild taking into account advice of school, family, employers and public organizations).

In order to provide an effective management of the «specialist school - technical college» system, an integrated monitoring system for education quality control was developed. It was designed basing on methods of qualimetrics and educational cybernetics. Such a complex approach let standardize and schema-