

Bologna Process and Higher Technical Education in Ukraine

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This paper describes the problems the system of Ukrainian higher education faces at current period. The achievements at implementing the Bologna Process principles in Ukraine are described. The most important problems are stressed. The recommendations on education system improvement are given.

I. INTRODUCTION

In Soviet time in former Soviet countries there was established some specific "employer-employee" system. The system of education was dedicated to satisfaction that system. It had some positive and negative features. They are discussed even now as the issue of creating the own effective education system is relevant for Ukraine as a young country.

Unfortunately, in the discussions it is not always stressed that former Soviet job rules don't exist any more. And the leading task for modern Ukrainian education system is the creation the most comfortable conditions for the graduates not only at interior, but also at the international job market. So, we have the problem of total coordination in juridical, professional, qualifications, etc. directions of the Ukrainian educational system and world educational area. The important step in this movement was joining with Ukraine the Bologna process in 2005. The educational reform is a national priority. But it is not just the educational system problem now.

II. CURRENT UKRAINIAN HIGHER EDUCATION PROBLEMS

For last time in the Ukrainian higher education area many actual major problems appeared. Their existence and solution depends not only, even mostly not on Bologna Process reforms. They are:

- excessive number of educational directions and specialties;
- neglecting the bachelor degree as a professional degree, lack of bachelors demand at the job market;
- the dangerous trend to education quality deterioration;
- breaking the ties between educators and employers, education area and job market;
- unjustified closeness of specialist and master degrees;
- decline in university research;
- indefinite state of such a wide-spread in Ukraine educational unit as two-year colleges (their quantity is four times more than universities quantity).

Unfortunately, lack of legislative basis doesn't allow the higher education institutions (HEOs) to give the sufficient education – the education complying with modern job market demands. As an example, at government level the problem of the bachelor's place at job market is not solved yet, though in year 2008 the shifting to two-degree "bachelor-master" education form (without specialist, or engineer, degree) is beginning.

By the way, the issue of masters employment is not definite yet. In educational circle there are many discussions of possible ways to go. For instance, there are the following ideas. First, to recognize the bachelor's degree as educational-qualification level with educational part domination. Then it will be the basis for the next master's educational level for 15-20% of bachelors. In this case the open issue is how to substitute the specialist (engineer) qualification level to which the employers and educators are used. Second, to have two master degrees types – engineering master and science master. Actually, this is the conservation of present traditional for Ukraine educational system with changing the names only. In this case there are open issues about the study duration, its cost and recognition these degrees with the world community.

At the author's opinion, the right way for higher education system in Ukraine is that, which introduces two-degree "bachelor-master" system, but bachelor must be mostly not only educational (academic) but also qualifications (professional) degree which gives the possibility to a graduate to take some junior engineer positions. Getting the necessary qualification by a bachelor must be without increasing the term of his study due to the reallocation of study process consistent parts (humanities, fundamental sciences, and professional subjects).

It is evident, that the most effective way for education to meet the employers needs would be the forming of qualification demands by the employers, not vice versa, when the educational organization form the educational-qualification characteristics and education, in real, works for itself, not for job market. It also concerns the quantity ratio of graduates of different levels.

Setting quantitative and qualitative professional demands for all levels graduates must be determined only with the job market, the economy needs. Unfortunately, for now in Ukraine the conditions for this approach are not set. So, the work on planing, education contents and terms, education financing, and first job employment is being done with the educational institutions.

So, there is urgent necessity to settle on legislative level many issues. Among them are:

- to set the new list of specialities and primary professional positions at all levels. To set the distinct determination the limits and possibilities for every professional category at career development, social and material status, that renews the motivation had been lost for young people to get some educational and qualification level;
- to settle the issue on order and size of educational branch financing by the government; introducing the system of government, regional, and private grants on education which would connect the issues of study and employment, realizing the teaching for concrete customer principle;
- to set the transparent support system at education for talented youth from poor families;
- to develop the principles of setting the elite education in the country.

For recent time some steps in this direction have been done. The Cabinet of Ministers of Ukraine decrees "About the specialities list for teaching bachelors" (13.12.2006), "About the specialities list for teaching junior specialists" (20.06.2007) were issued. In this documents the specialities lists are coordinated. This kind of documents for masters is being prepared.

Besides, in April 2007 the Ministry of Education and Science of Ukraine declared the higher education in Ukraine organization scheme. According to it 20% bachelor graduates who have some professional characteristics will be able to continue their education to get master's degree. Other 80% will have to look for a job in industry. So, it is urgent to determine bachelor's status in terms of their qualification and possible primary positions they can take.

III. THE STEPS IN PROBLEMS SOLUTION PROPOSED

Considering the ways of solving the problems set above it is possible to propose the following.

1) Establishing the five-level post-secondary education with the levels of qualified worker, junior specialist, bachelor, master, and doctor. The number of students, from lower levels to masters, whose tuition is financed from the budget must be determined exclusively with the real demands of economy. Up to the distinct juridical mechanism of this kind of relations between the employers and educational system creation this function may, as before, depend on Ministry of Education and Science. As about education for the students money, the only limitation may be the HEO licence for teaching on some speciality.

2) To distinguish the levels at the first job place establish the position of probation engineer for bachelors, the position of technician for two-year colleges graduates, and the position of qualified worker for vocational schools graduates. Further bachelor's career development will be after his first job place (its duration may be limited with 2-3 years depending on the job). Then the bachelor passes some

qualification exams and gets the low category engineer qualifications. For getting the higher engineer qualifications the mandatory condition for a graduate is having master educational-qualification level on certain speciality. The same way the scientific and scientific-pedagogic contingent should be formed.

It is clear that in humanities (where there is no engineer qualifications) there will be its own two-level system, but the basics proposed may be kept.

Having the information on job market demands in defined specialists categories (or the demand prognosis) it is possible to plan quantitative and qualitative cast of annual all levels educational institutions admission and graduation plans. In this case the system is more flexible without establishment the rigid ratio, like masters number is 20% of bachelors. There is possibility of migration the students of one level to another level. It provides again education flexibility and the possibility of personal professional schooling correction according to abilities detected along the study which were not detected before that. Besides that, inter-level migration allows to react on current job market demands faster, without 3-4 years inertia. Masters study separation beginning from the first year has its own grounds and doesn't contradict the two-level bachelor-master because studying on future master curriculum the students have some normative bachelor curriculum part and get bachelor education-qualification level but the variable part of their curriculum will be different with that of the bachelor oriented to working in industry right after bachelor graduation. The same way the migration between junior specialist and bachelor levels will be done. Again, the determinative factor of this process number values determination is job market demand. In this circumstances credit-transfer system introduction is the key factor of success.

3) There is sense to start considering the educational activities financing from the assertion that people must have clear understanding that education is a process which needs a lot of expenditures and the volume of these expenditures grows constantly and substantially. It is caused with the growth of information amount the student must master and using up-to-date technologies and technical facilities for successful mastering. But this kind of investment is defensible. Investment in education is the best investment into the future. Today in Ukraine higher education financing has three sources: state budget, business payment for tuition and personal payment for tuition. Statistically proven that the major financing comes from the third source. It causes some collisions: on one hand, there are concrete job market demands, on other hand, there are people's wishes to get the speciality they chose and for which they are ready to pay. During last years the issue of no-purpose use of budget finance in education was raised. As no-purpose were defined finances for education of students who worked at non-government enterprises after graduation or were sent down after second year of study. This standard worked in Soviet Union but in that time the education was financed only from the budget and all enterprises belonged to the government. Now it is outdated. So, it is reasonable to introduce rotation

for those who study for the budget expenses. This principle is based on the assumption that all tuition forms are equal. The government investing money into a student must get in some term a specialist of some qualification and it is not important who specifically will be that person. So, the order of enrolment for budget finance may be the following: according to the results of tests those who have privileges according to the legislation and those who have better grades are selected. For other licensed places those who have positive grades and payed for their tuition are accepted. All the students have the agreement with the educational institution signed. According to that every year the form of financing for next year must be determined. The criterion for this form determination is student's progress (grades) during the year. This way every year the contingent of those who study for budget money is formed. It provides on time (during 3-4 years) preparation the necessary bachelors number for the economy. Those who studies for non-budget expense may study more time that the term established for others until they get required qualification.

It is necessary to solve the problem of attracting the employer to education and science financing at the legislation level. Today the employer (mostly private) gets the qualified employee as a gift from the government or the parents. It burdens the state budget and leads to poor education financing. Therefore, it is rational to make changes for example in tax legislation introducing the partial compensation from businesses for the professionals they get or decreasing the tax burden for those who finances the education. It provides better job opportunities for the graduates as now the Universities are responsible for the graduates first job place as in Soviet time.

4) The privileged students number increase is possible not only for the state budget expense but also for the expense of grant system. Any talented young man or woman must have the possibility to get a grant for study independently of

his or her financial state. The most important condition of getting this kind of financing for a student must be success in his or her study. Now in Ukraine this system is developed very poorly but there are good examples at European and American countries.

5) The problem of elite education is a burning issue and is considered ambiguously in the society. But all developed countries have this kind of education. It educates top government managers, distinguished scientists who are able to make world level inventions, world level authors etc. How is it going to be in Ukraine? Will some separate institutions be dedicated to this or they will be the departments of education market leaders? This is a discussion issue but it is very relevant and needs a solution.

IV. CONCLUSIONS

The achievements of Ukrainian educational system on the way of Bologna reform got quite high grade from international community (3.9 with 5 the highest grade). One of the main parts of this success was introducing the credit-transfer (credit-module) study process system as this approach gives the necessary flexibility, mobility, decreases the assessment subjectivity. But there is a danger of study process excessive formalization, substituting the studying with simple training. There are many issues and problems for educators in this field. The problems of proper education financing, market influence on the contents and quality of professional education, increasing the amount and results of research are open now.

There are possibilities of the problems solution but it needs political will from the government and a lot of work of professionals and in the society.