

HIGH EDUCATION SYSTEM CHALLENGES IN THE CONTEXT OF REQUIREMENTS OF LABOUR MARKET AND SOCIETY

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Annotation.

Development tendencies of the national higher education system under the current conditions in the context of the world and European integration processes were studied in the paper. Education reforming areas and its key tasks were characterized. The reasons of noncompliance of skills formed in graduates with labour market needs were discovered. International investigations on the required needs at labour market and effective methods and training technologies were analyzed.

Keywords: higher education, labour market, professional skills, competencies, training technologies.

ВИКЛИКИ СИСТЕМИ ВИЩОЇ ОСВІТИ В КОНТЕКСТІ ВИМОГ РИНКУ ПРАЦІ ТА СУСПІЛЬСТВА

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Анотація

В статті досліджено тенденції розвитку національної системи вищої освіти в сучасних умовах у контексті світових та євроінтеграційних процесів. Охарактеризовано напрями реформування освіти та їхні ключові завдання. Виявлено причини невідповідності сформованих у випускників вузів навичок потребам ринку праці. Проаналізовано міжнародні дослідження щодо затребуваних навичок на ринку праці та ефективних методик та технологій навчання.

Ключові слова: вища освіта, ринок праці, професійні навички, компетенції, технології навчання.

Problem definition

The current social and economic development of Ukraine requires available well-educated and qualified specialists and effective technology implementation. The national higher education system directly contributes to the mentioned need implementation. Under the current conditions, particularly, when higher education is obtained by more and more graduates from secondary and vocational education, higher school acquires special significance in the national education system and activates attempts to enhance its influence on higher education content and quality. The above mentioned phenomenon is a worldwide trend. So, already in 2000 the International Organization on Higher Education Development (Task Force on Higher Education) mentioned that "higher education no doubt is a new education development line in increasing number of countries" [10].

Basic challenges for the national higher education system under the current conditions are the following:

- Dynamically variable labour market requirements and connected herewith necessity of providing stable institution connections of higher education and labour market;
- Higher education turning into basic source of innovative economic development (European and Ukrainian), increase in higher education role in carrying out scientific and research and developmental works (SRDW) and need to strengthen ties of HEI with scientific institutions, manufacturing companies and business;
- Education programme diversification, including at the expense of non-governmental HEI, increase in mass higher education, academic freedom extension, increasing individualization of educational patterns (initial tracing) of higher education obtainers and related hereto need to provide system dynamism if more effective control of higher education quality is required;
- Increasing external and internal labour and scientific and educational mobility and related hereto need both to preserve single educational space and working out complex strategy of higher education internationalization;
- Lack of higher education funding, on the one hand, and increase in paid educational services under the conditions of increasing social and economic society differentiation, on the other hand, and related hereto need to increase efficiency of higher education funding procedures and ensuring available high education of high quality for different categories of population;
- Demographic situation change preconditioned, first of all, by decline in the birth rate at the beginning of 1990s related hereto need of serious institution reforms, education content and structure restructuring under the conditions of increasing HEI competition [4, p. 16].

Goal of the paper: to analyze general peculiarities of the current development tendencies of higher education system in the context of world and European integration processes.

Analysis of the recent studies and publications

Theoretical and methodological principles of modernization of educational sphere, issue of effective interaction of higher vocational education, educational service market and labour market under the conditions of innovative society step were investigated and widely highlighted in the papers of native and foreign scientists, such as V. Andrushchenko, M. Afanasieva, M. Doronina, Yu. Zinkovska, V. Luhovyi, T. Obolenska, S. Nikolaienko, R. Patora, Yu. Sukharnikov, B. Kholod, M. Armstrong, Ch. Woodroof, Kh. Davis, J. Raven, etc. Publications in the sphere of educational range of problems in the context of innovative social development which are a synthesis of different spheres of both economics and pedagogies of native scientists I. Anosova, V. Voitsekhovskiy, A. Halchynskiy, M. Holovan, I. Zymnia, A. Kolota, V. Kryzhka, Ye. Krykavskiy, S. Stepanenko, H. Khoruzhyi, F. Khutorskiy gained scientific interest. Essence features and characteristics of education development problems, reasons undermining greatly opportunities of the current vocational education on formation of competitive human resources in Ukraine, delayed reaction to market needs producing significant qualification distortions in the employment sphere, unemployment among youth and HEI diploma status loss are investigated by L. Shevchenko [5]. At the same time, the above mentioned problems are only little element in the study of professional and educational activities of higher education institutions on the innovative basis.

Basic material of the study

In his Annual Reference to the Verkhovna Rada the President of Ukraine P. Poroshenko has emphasized: "Education is one of the major factors of increase in human capital asset quality, a new idea generator, guaranty of dynamic economic and social development in general. In order Ukrainian education to perform these important tasks in a truly effective way, its renewal with consideration of the latest global education development tendencies in the wide social and economic context is required" [1].

State interest in education reforming is explained first of all with needs of society, which is with ever increasing frequency expresses dissatisfaction with education quality. That's why basic official reform setting is increase in efficiency of all education links.

Education system reforming in Ukraine complies with the global tendencies of this process. In particular, national systems of higher education have been reformed in many countries since 1980 (and transnational – in the form of Bologna process development and creation of single European educational space). In 2010 Bologna process evolution was continued with initiative "The European Higher Education Area, implemented under the current conditions within EU initiative "Europe 2020" and "Education and Training 2020", in which the following was determined as basic objectives: higher education quality,

diversification and flexibility. Four groups of activity areas [Education and Training] were distinguished for solving "quality-diversification-flexibility" basic objective triad: 1) continuous education and flexibility concept implementation; 2) education and training efficiency and quality improvement; 3) efforts promotion in the area of social unity and fairness; 4) intensification of creative, innovative component of educational process. Frame benchmarks 2020 on student community in Europa 2020 concept as: 1) covering more 90% of youth; 2) 40% of youth has to receive completed higher education forms; 3) involving minimum 15% of adults in continuous education processes; 4) at least 20% of graduates and 6% of youth with initial professional skills spend some time for advanced training abroad; 5) employment of at least 82% of youth with secondary and higher education etc [7].

Basic direction of education reforming is also providing skills required at labour market for graduates. Today, there is a great disbalance between skills formed in studentship and skills required on the working place.

Understanding of the fact that employees' erudition influences business profitability in a positive way, to a considerable extent causes awareness of employer's investment in worker professional competence improvement being a significant component of business development.

Unfortunately, business expenses for professional education in Ukraine not always comply with the task of social and economic development of society. The reason for such condition is equally both employers' low requirements and not high training quality of specialists with higher education.

From the part of employers, there are significant substantiated claims to HEI on training quality of specialists with higher education that makes employers to provide additional or corporate training. Fourthly, there are certain problems with implementation of principle "education during the whole life" leading to difficulties in interaction of higher education sector with post-higher education sector – in particular with systems of advanced training and retraining.

It is reasonable not to forget that higher education plays the role of powerful layer on the labour market – great amount of personnel works at higher school, many students "postpone" their entrance to labour market obtaining professional competences for a certain time. The mentioned role of universities as a "social safe" was emphasized by Zygmunt Bauman. "Tasks of professional training gradually but continually are transferred from universities and it happens everywhere being shown with decline in country's will to finance it from social funds. It is easy to suspend that universities greatly are obliged for still stable level of student flow to unexpected but desirable role of temporary shelters in society affected by temporary unemployment; structure allowing youth to postpone acquaintance with strict realities of labour market for several years" [2].

Shortage of specialists, insufficient level of employees' education and professional skills are key problems restraining labour and production efficiency growth, business profitability are the problems to which attention recently has been paid. Similar problems are also met on foreign labour markets. Thus, at the beginning of 80s many spheres of British economy had a need in qualified engineering personnel, which wasn't satisfied. In the USA at the end of 90s demand for highly trained professionals exceeded propositions and increased quickly enough. In the middle of the first decade of XXI century 44% of employers of the Great Britain mentioned that they could lose their business due to lack of specialists of the necessary qualification [9].

"One of the most serious problems is absence of the relevant statistics on actual correlation of personnel on the labour market of Ukraine. Disbalance of labour markets and education is caused to a great extent by absence of system interaction between the concerned parties: state administrative bodies, vocational training system, employers and employees" [1].

Prevalence of incompliance (disbalance) between actual and necessary levels of employees' education and qualification is a constant topic of the Ukrainian and foreign

researches. The reason of such disproportions can be both increase in requirements to employees from the side of employers according to new organizational and technological changes of production and decline in quality of educational level of future specialists, in certain cases – employers' disinterest in increase of professional level of employees with insufficient qualification due to great expenses for these objectives.

In its research Future Work Skills 2020 the Institute of Future distinguishes 10 important skills for success in work of future: sense understanding; social intelligence; ability of extraordinary thinking, adaptive thinking; cross-cultural competence; computational thinking; media literacy; interdisciplinarity; project thinking information management; ability of remote work. At the end of the last year the Institute of Future completed its list with already 3 necessary skills: self-motivation, time management in management of its income sources, online recruiting management [8]. It will help graduates to adjust to the world labour market.

Changes which should be implemented in education were discussed by international specialists at the World Economic Forum in Davos. Does education system perform its basic functions today and what changes are going to happen? Which education is required by youth to understand the world of tomorrow? – were the matter of discussion. The World Economic Forum published the list of skills necessary up to 2020, where you can notice a remarkable difference in needs in 2015 and 2020. More creativity will be required. Ability to solve complex tasks comes to prominence.

According to experts, it is currently important to emphasize to business about its responsibility as to determination of required by them skills and direct participation in their development. The second important moment is education structures. In many countries education is disconnected from reality. And, of course, it is important to assure youth and their parents that vocational training orientation is the guaranteed work of tomorrow. Parents often encourage children to enter universities, develop skills which won't be needed by children in future. It is currently important for teachers to realize that education is not only knowledge transfer, we should consider it as an ability to ask questions, critical thinking, discussions, debates, studying other countries and cooperation with people all over the world as an active creative dialogue [3].

The following is distinguished among educational technologies which are determinant in the world of future:

Corporate on-line training – more and more companies understand that its employees' training encouragement with flexible, economically effective methods developed considering individual needs of each person is of great significance. Despite of academic Mass Open On-line Courses (MOOC) companies oriented on corporate electronic learning (e-learning) have found business model that works and works well. Corporate on-line training allows employees to feel power of adapted training 24/7 on any technical device in any sphere and at any level. Instead of hours given for class training trainees can learn in any convenient time using adapted formats. Everyone can move in its own progress rate, learn what he/she needs to, study what he/she is interested himself/herself. Still comparatively young branch corporate electronic learning promises to give new educational models and captivating discoveries in future.

Competence measuring – competence assessment and individual progress measuring in studying is based on competencies and finally on ROI i.e. return on investment. It is mentioned in the Institute of Clayton Christensen that when we provide adapted education, it is important that all parts of modular training will be harmoniously built in a single unity. Therefore effective ways of knowledge assessment and students' learning dynamics tracing in order to guarantee high quality information interchange of each component of their curriculum are necessary.

When learning based on competencies and remote learning (on-line learning) is not something new, its combination creates a revolutionary approach to education. Michelle R. Wise and Clayton M. Christensen write that on-

line learning based on competences has "a great undermining potential" as it includes not only correct learning model but correct technologies, clients and business models. Wise and Christensen continue explaining that providers of on-line learning based on competencies "can effectively combine learning modules due its flexibility and adaptability to variable labour market". They do it splitting learning not into courses or subjects but on competencies making learning free from limitations of traditional institutions and methods. Due to such learning students have individual support, receive support in their achieving certain educational goals and receiving set of competences adapted from employer's will and therefore successful employment.

Flipped learning technology – Information Week determines "flipped learning" technology as one more key tendency of educational technologies. Flipped classes are form of mixed learning when students watch outside video lectures, including on-line Internet content and then do their homework in class directly under teacher's supervision. Such approach encourages students' involvement both in extracurricular time and on the very lesson.

Alternative learning styles – learning styles offering to students more interactive experience, for instance, code writing directly in browser or on-line task performance within teaching and learning process. Pluralsight made the following purchase in the context of this tendency – Code School.

Code School offers a unique approach based on alternative teaching style – more interesting, interesting and effective than simply video. Users can watch short video with Code School, then stop and practice what they have learned using series of interactive coding and assessment tasks – all this is done in browser before continuing. While progressing in material mastering students score points and marks which individually direct teaching process and progress of everyone. There are also mobile applications, so users can watch and review video under way, completing coding and continue on-line studying.

On-line learning based on competences – by this model you can economically effectively combine learning modules due to its flexibility and adaptability to variable labour market. Learning is built not by courses or subjects but by competences, making learning free from limitations of traditional institutions and methods. Students receive individual assistance, support in achieving certain educational goals and receiving set of competences adapted from employer's will and therefore successful employment.

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Conclusions

Training system of specialists in higher education system requires fundamental reforming. Development of technologies, manufacturing forces and society create new

challenges for citizens and corporations, cities and countries. Many-sided training of people for effective activity under new conditions that can be provided by education of high quality is required to be up to challenge it. Globalization has become an effective development factor of civilization, economics and education. Higher education can't already be limited to specialist training for local or national labour market. Actually the whole world is open for students, meaning the need to assure their competitiveness becomes a strategic task of all universities. It is necessary to organize interaction of employers and HEI as to forming the necessary skills for labour market in students. Teaching and learning activities in universities should be carried out using the contemporary technologies and methods.

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