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IMPLEMENTATION OF THE DUAL EDUCATION SYSTEM INTO THE TRAINING OF FUTURE AVIATION SPECIALISTS

The article reveals the use of the dual education system in the personnel professional training. Dual training is considered as a component of the system of future aviation specialists' professional education, its essence and significance are regarded, and the relationship between enterprises and higher education institutions as partners in the system of dual training is displayed.

***Key words:** dual education, dual training, professional education, professional training, enterprise, professional socialization, modernization.*

Problem issue. At the present stage of State-building of Ukraine, the problems associated with the imperfection of the mechanisms of interaction between education and the labor markets were acutely emerged. The intensive development of globalization processes causes revolutionary changes not only in the world of economics and finance, but also in the labor market and the education system. Both in the national and international theory and practice attempts to solve the problems of preparing young people for joining and adapting to the lab our world are being made.

The transition of the world community from techno genic to anthropogenic civilization, modern socio-cultural realities, the domination of the humanistic paradigm in pedagogical theory and practice determine the necessity to develop innovative approaches to the design of modern educational systems. The production of information and new knowledge is carried out by science and education. But without connection with production, science and education are not factors in the development of the economy. Since science that produces new knowledge and education that trains skilled specialists, first of all, they create the necessary conditions for the development of the economy, and the realization of these conditions is carried out only in the process of production. There is no doubt that at the time the problem of science and education internal integration with production in order to prepare a creative, competitive aviation specialist is being solved.

Analysis of recent researches and publications. Different aspects of professional education are disclosed in the scientific researches of N. Abashkina, A. Zavalniuk, N. Kozak, N. Kravets, L. Sakun, A. Turchyn, V. Tiahur, N. Udovychenko and others. Theoretical and scientific developments in the field of systematic organization of professional education on the basis of the methodological principle of duality are considered in the papers of such German scholars as: G. Baumann, A. Lipsmayer, G. Pezold, A. Shelton, K. Stratmann, H. Stegmann, etc. A wide range of researches, including the studies of national and international scholars: E. Zeer, P. Kubrushka, V. Lednioy, H. Mukhametzianov, V. Prikhodko, V. Ishchenko, Z. Sazonova and others are devoted to some aspects of the problem of the integration of education, science and production.

The purpose of this article is to reveal the essence and significance of the dual education system for the professional training of young people in Ukraine. The advantages of dual training in professional education of aviation specialists are developed.

Presenting main content. The strategic doctrine of modern progress is based on the concept of comprehensive disclosure of human opportunities. Priority investment in personality is not a consequence of the State prosperity increase, but its cause. The transition of the world community from technogenic to anthropogenic civilization, modern socio-cultural realities, the domination of the humanistic paradigm in pedagogical theory and practice determine the need to develop innovative approaches to the design of modern education systems.

Social partnership between educational institutions, business representatives and the State is at a rather low level. Central and regional (local) government authorities are supposed to promote the interaction of education and the labor market, coordinate work, but there is a lack of concerted action in the activity. They are not currently responsible for nonfulfillment the tasks entrusted to them by the relevant regulatory acts. It is certainly not a complete list of problems, the solution of which would improve the interaction between education and the labor market. In this regard, all components of the mechanism for regulating the interaction between education and the labor market (legislative, organizational, managerial, structural, financial, purpose-oriented, etc.) need to be improved. One of the sources of this process is the study and implementation of European experience in regulating the interaction between education and the labor market.

The system of higher education modernization in post-industrial society requires both effective practical implementation and theoretical substantiation. The educational system of Ukraine has long ceased to be closed, the processes of globalization and internationalization, in the first place, the Bologna process, require a substantial adjustment of the educational policy of the internal education system. In order not to lose its advantages, this system should become more competitive, technological, flexible and human-oriented at the earliest possible time.

In this case, education should not only be the theory, it must be integrally combined with the real practical objectives of a particular professional field. In the context of the educational services globalization, more young people prefer the educational model, which will guarantee them successful employment with a specialty that is in demand in the modern labor market. And from education they expect primarily mastering the practical skills which are considerable for employers. In modern conditions, professional education is aimed at specialist training of a particular specialty and can gradually substitute the classical system of training.

O. Romanovskyi brings the attention to the necessity of creating an educational system that meets the challenges of present society: "Creation of an optimal model of higher education, which would ensure the specialists training with a high level of general and professional knowledge, skills and abilities, is a leading tendency in the development of this industry nearly all over the world" [1].

Over the past decades in the European Union there has been a rapid re-orientation of most national education systems from socialization in national culture to the development of common education policy as to training of the skilled professionals for living and working in commercial competitive global economy. One of the main courses of the modern European policy concerning the development of higher education is the creation of opportunities for the dual models implementation of higher professional education. The projects "Developing European Work Based Learning Approaches and Methods" (DEWBLAM) and "Work Based Learning Qualifications" (WBLQUAL) gained wide recognition in the countries of the European Union. These projects are designed to develop all-European models, approaches and qualifications for dual education in higher education institutions of the European Union to increase the access of adults to higher education. Since our country is a Bologna process participant and the national system of higher education is in the stage of reforming and searching for innovative models of training, we consider it topical to study the models of dual education in universities of the European Union [2].

An analysis of international sources also confirms that models of dual education are various. The European Commission divides dual education into three models: apprenticeship, periodic training in the company and integrated training. It varies from two weeks of practice course within the curriculum to specialists training course according to dual education program, where students have their personal contacts with the company, and 4/5 of the training takes place in the company [3].

Thus, the dual model of higher professional education combines classical higher education with professional education or with practical professional activity at the enterprise. In other words, dual education occurs at the formal (university) and informal (in the workplace) levels. At the informal level, the net and interactions with people inside and outside the organization are involved to obtain new knowledge. Training requires both personal reflection on the outcome, as well as dialogue and feedback from others, including colleagues and executives. Typically, dissimilar categories of adult students take part in dual models of higher professional education:

- 1) full-time students, who are assigned to work by the curriculum;
- 2) full-time students (working part-time);
- 3) adults who have full employment in the workplace, but who strive for studying subjects related to work in the context of knowledge, skills and values of higher education institution. The common feature of these groups is that adults perform work, or act as employees [2].

In our opinion, it is important to identify the peculiarities of dual education, because it differs from the traditional training by a number of indications. Firstly, dual education is centred on reflection regarding working practices; it's not just mastering a set of technical skills, but also gaining proficiency in critical thinking and training through experience. Secondly, the model of dual education considers training as the result of action and problem solving in the work environment, and thus is focused on living projects and problems. Dual education also creates knowledge through general and group activities that involve discussing ideas, vital issues and making decisions. Finally, dual education requires not only obtaining new knowledge, but also the formation of meta-competence - the ability to learn.

Consequently, the main features of dual education in higher education are: establishing partnerships between concerned parties such as: employers, students and higher education establishments; the inclusion of formal academic recognition of prior learning and experience through the accreditation system (Accreditation of Prior Learning, APL, Accreditation of Prior Experiential Learning, APEL); the availability of innovative and captivating component of the learning system based on the blended learning methodology. Different forms of training and teaching are characterized by: (critical reflection and reflective actions, which unite new theories with experience; practical projects that meet the needs of all concerned parties and stipulated by the training agreement; methodology and methods of distance and e-learning; individual support of the student from educational institution and working organization) [4].

The design of dual education programs depends on the previous and current adult student's experience. Educational curriculum may consist of credits from various sources. It includes: contractual modules of dual education; present course modules at the university; accredited short-term courses; accredited training programs provided by the employer; accredited modules or courses offered by other educational institutions; accreditation of prior studies [2].

Dual education programs usually have the following characteristics: a student has obligations as a worker, or has contractual relationships with the company; the student agrees the training plan with the representatives of the educational institution and the enterprise. Different students have personal way of learning; the curriculum corresponds to the needs of the workplace and the student, and is not pre-made by the educational institution according to the subject or professional context. The starting point and educational level of the program are established after the student undergoes the process of recognizing the existing competencies and identification of the training in which he wishes to participate, but not based on the existing educational qualifications of the student; training projects are usually carried out in the workplace. They are focused on the problems of the workplace and the future needs of the student and the enterprise. Part of the general curriculum may be modules of other educational services providers and training courses; an educational institution evaluates the learning results by contractual programs in accordance with the system of standards and levels of qualification. Such structure is absolutely trans-disciplinary [5].

There is a negative tendency of employable population outflow from Ukraine with no prospect of returning home. As a result, Ukraine loses skilled professionals and employable population.

Dual education programs are one of the strategic directions of modernization of higher education, which expands the chances of educational institutions to succeed and to develop harmoniously in the context of education services market globalization. Learning in dual education system contributes to more considerable and versatile professional development of the students, increases their competitiveness in the Ukrainian and world global labor market.

Representatives of Ukrainian higher education establishments generally support the idea of dual education. As you know, one of the main sectors of modern technical universities in the leading countries is innovative centers for the development of new technologies in various fields. Unfortunately, now this sector is not generative at Ukrainian universities. Therefore, dual education is capable of "reinforcing" this sector, when specialists of innovation centers, who simultaneously are teachers and form strategic vector of senior students training. Senior students are golden fund that must be concerned by two partner parties: universities and enterprises. After all, the education process is relegated to the practical training of the students.

It is very important to establish such innovative centers in national universities, as in leading Western universities.

The Flight Academy of the National Aviation University (LA NAU) is actively working on the implementation of the dual education system and the possibility of students' employment. Indeed, during dual education, skills that meet the needs of employers are added, the ability of future professionals to form goals are developed, as well as responsibilities and ability to plan future career. These initiatives are primarily focused on the curriculum with included industrial practices at the following enterprises: the structural subdivision of "UkSATSE"; air companies of Ukraine; Military Forces of Ukraine; National Guard of Ukraine; State Emergency Service; airfields certified by the State Aviation Service of Ukraine.

The research and educational personnel of the LA NAU is working to ensure that all students have the opportunity to take advantage of available employment opportunities and acquire appropriate skills. Working on improving the strategy of employing their graduates, the Flight Academy of the National Aviation University is cooperating with Ukraine International Airlines (UIA) and other employers who are interested in highly skilled and competitive professionals.

Conclusions and further scientific research perspectives. Dual education includes the concept of working activity as curriculum in formal university education. It includes a matrix of relationships between concerned parties (the employer, the teacher and the student (employee)) which are involved in the training process, the work and the formation of knowledge and skills. The peculiarity of education content is an integrative curriculum, which is developed jointly by student, university and enterprise. Concerned parties act in a common context. The above stated suggests that dual education model offers an alternative approach to traditional teaching and training at universities. This practice requires a revision of traditional understanding of the academic identity of the teacher and the determination of study. Therefore, the roles of the teacher in dual education model and the roles of the student's professional experience in training are required further consideration.

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РЕАЛІЗАЦІЯ ДУАЛЬНОЇ СИСТЕМИ ОСВІТИ В ПІДГОТОВЦІ МАЙБУТНІХ АВІАЦІЙНИХ ФАХІВЦІВ

Анотація. У статті на засадах позитивного світового досвіду використання дуальної системи професійної підготовки кадрів розглядається дуальна підготовка як складова системи професійної освіти майбутніх авіаційних фахівців, розкривається її суть і значення, показано взаємозв'язок підприємств та вищих навчальних закладів як партнерів у системі дуальної підготовки.

Ключові слова: дуальна освіта, дуальна підготовка, професійна освіта, професійна підготовка, підприємство, професійна соціалізація, модернізація.

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