THE PECULIARITIES OF PROFESSIONAL TRAINING AT HIGHER AND VOCATIONAL EDUCATION INSTITUTIONS OF THE EASTERN PART OF UKRAINE WITHIN THE CONTEXT OF INTERNATIONALIZATION PROCESS (DONETSK OBLAST CASE)

The article presents the results of the case study of the process of providing educational services in the field of professional education in institutions of higher and vocational education of Donetsk region, eastern part of Ukraine, with the reference to the process of internationalization as one of the realia of professional education today. The process of internationalization is outlined as a process of cooperation with public authorities, heads of educational institutions, teaching staff and students to support the international component of the process of providing educational services. It is pointed out that the reform of the system of professional education in higher and vocational education institutions today influences not only the further prospects of development of educational sphere, but also the application of new strategies by institutions in the context of their positioning. The study provides a number of practical recommendations that can be considered as a basis for monitoring the needs of the regional labour market and the creation of a dual study form. The recommendations provided create the ground for successful functioning and development of the professional training system in the region, and the process of internationalization is defined as a factor that influences the transformation of professional education system towards modernization of its basic structural elements in order to improve quality in the face of increasing labor market needs, and therefore to improve the image of educational institution.

Key words: Internationalization Process, Higher and Vocational Education Institution, Professional Education, Labour Market, Dual Form of Study.

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Ключові слова: процес інтернаціоналізації, заклад вищої та професійно-технічної освіти, професійна освіта, ринок праці, дуальна форма навчання.
Introduction. It is well recognized that education plays a critical role in eradicating conflicts, enhancing peace-building and reconciliation processes on conflict-affected territories, steering the vision for prosperous and sustainable society development. Armed conflict in the eastern part of Ukraine has had a significant and detrimental impact on human welfare, social and economic conditions and the state of education system in the region. Leading higher education institutions and vocational education institutions became displaced after 2014 and encountered significant problems while providing educational services on conflict-affected territories. At the same time as the 2018 World Development Report and the 2016 Global Education Monitoring Report (URL: https://connections.etf.europa.eu/communities/service/html/communityview?communityUid=91a0c81f-f231-47aa-ab18-8f973dd8591b#fullpageWidgetId=W3d23a6666d1c39bcb5562aebd1fc3) have made clear – education saves lives, improves health and fosters shared understanding and values; it is a foundation block for nearly every other sustainable development goal outlined by United Nations. Thus, profound, well-grounded and innovative knowledge obtained as the result of education process is one of the important preconditions of efficiency, productivity and profitability of the conflict-affected eastern region of Ukraine. Strengthening education-services-providing capacities of higher and vocational education institutions, fostering their economic, administrative and methodological revitalization through demand-driven teaching services, professional skills training, restoration and strengthening of institutional and educational infrastructure needed for effective providing of educational services in the region is the main objective of the internationalization process in higher and vocational education of the region, the realization of which will lead to economic recovery, restoration of critical infrastructure of the educational institutions, strengthening social cohesion in the region, increasing rates of employability, and finally to the promotion of peace and development goal outlined by United Nations.

The aim of the article. Based on the aforementioned, the goal of the research is to analyze and identify the top-priority issues of Donetsk oblast higher and vocational education system within internationalization process, their relevance to the needs of the regional labour market, as well as to develop a set of recommendations for a broad range of stakeholders to use to resolve them. To achieve this goal, the following tasks were identified and implemented: to analyze the impact of the changing socio-economic status of Donetsk oblast on higher and vocational education system; to analyze the functioning of the regional labour market, to identify key trends and the extent of their impact on the development of educational sphere of the oblast; to review the components of higher and vocational education system (personnel; logistical, institutional, functional, legislative and normative support; the degree to which training of workers meets the needs of the labour market, the use of the latest training programs and forms, etc.); to calculate, as an example, the degree to which the curricula at higher and vocational education institutions meet the needs of local labour markets; to elaborate conclusions and proposals for modernizing this sphere of education within the context of internationalization process based on the needs of the regional labour market.

Materials and Methods. The methodological basis of the study was the comprehensive analysis of the data on employment and labour market (especially the youth segment); educational services, in terms of type, form, and subordination of educational institutions in 2005, 2010, 2015 and the following years, etc.; formal statistics and operational data provided by the statistical authorities, employment centres, the Department of Education and Science, higher and vocational education institutions for further analysis and comparison; the findings of a study carried out under the auspices of the Ministry of Education and Science of Ukraine and the European Foundation for Education (EFE); methodological recommendations for determining the correspondence of the level and qualification structure of personnel training in educational institutions, based on the needs of the regional labour market; methodological approaches to determining the needs of the oblast for labour over the short-term period of time (URL: http://zakon3.rada.gov.ua/laws/show/373-2017-%D0%BF/param11#n11. p.10).

Results and Discussion. Before the events of 2014, Donetsk Oblast was a powerful industrial region of Ukraine, which accounted for 13% of the country's exports. Its main developmental characteristic was the high share of the real sector in its economy, in particular, heavy industry. The leading positions in heavy industry were held by metallurgical production (40–45%) and the production of various raw materials, including coal. Due to the specific structure of the industry, and the location of certain types of resources, large companies dominated in Donetsk Oblast, where a significant portion of the economically active population was employed. The needs for training workers for those companies determined the number, specialization, and territorial localization of the Donetsk Oblast higher and vocational education institutions.

The situation changed substantially after the events of 2014. In just the first year of the armed conflict in the eastern part of Ukraine, the physical volume of the gross regional product of Donetsk Oblast dropped by 33%. The structure of the industry was partially changed. While maintaining a leading role of metallurgical production, the share of food products, beverages, and tobacco products, as well as engineering, dropped sharply. Since a significant part of industrial enterprises and social infrastructure facilities were located on the territories no longer under government control, it led to a complete breach of economic bonds, a dramatic reduction in output of certain products, and a redistribution of the economic potential between different centres in the region. The changing structure of the region's economy and misbalances in the distribution of economic potential has led to a shift in labour demand. Consequently, while the situation in the labour market of Donetsk oblast is very dynamic and multi-vector, the severity of the problem is gradually dropping. Still, occupational, regional, and other disparities remain significant, and these have to be considered in the preparation of the regional order for labour training in education institutions system.

Workers in Donetsk Oblast are trained for 16 sectors, covering over 110 labour occupations. The list of training areas mainly aligns with the economic structure that existed before 2014. The main areas of training are: 1) mining; 2) metallurgical production; 3) general occupations in electrotechnical production; 4) occupations common to all sectors of the economy; 5) railway transport; 6) road transport; 7) construction, installation and maintenance operations; 8) agriculture; 9) public catering; 10) trade and
commerce; and 11) services. Specialized state and non-state-owned institutions train workers for the following occupations: firefighter and rescuer, rescuer, driver, sailor, rescue sailor, and logger. The sectoral (industrial) and territorial concentration of directions and occupations of worker training in the region also have their own specifics (URL: http://zakon3.rada.gov.ua/laws/show/373-2017-%D0%BF/paran11%h11).

A review of the number and dynamics of professional education graduates of Donetsk oblast reveals the presence of certain trends that have emerged recently under the influence of the development of the labour market and the economy of the region. Over 55% of graduates come under such sectors as "public catering," "general occupations of electrotechnical production," "automobile transport," and "Services." The following occupations were leading in terms of the number of graduates in 2017–2018: "cook, pastry chef" (almost 650 persons), "wheeled vehicles maintenance technician," "Hairdresser/hair stylist" (430 persons), "Tractor driver, vehicle maintenance technician, Category "C" driver" (over 300 persons), and "Electric/gas welder, gas welder" (over 220 persons). The number of graduates in 2013–2018 grew in the tertiary sector of the economy. However, the reduction of the number of graduates exceeded 45% in the sectors of the economy traditionally dominant in Donetsk oblast, such as "metallurgical production" and "railway transport." This situation is explained, in the first place, by changes in the structure of the region's economy in recent years, as well as transformations in the job preferences of modern young people. Today, young people are not really attracted to working in mines, quarries, and large industrial companies.

The review of educational institutions in Donetsk oblast has highlighted the following specifics of the workforce training structure. 1) the number of licenses for training that institutions hold for training workers, and the number of occupations for which actual training is currently provided are highly inconsistent. 2) In most cases, workers are trained for integrated occupations, such as "cook/pastry chef". 3) these integrated working occupations are close to each other, although there may also be some exceptions. 4) the range of training for occupations of national importance is rather limited (six out of 24). 5) due to the specifics of the labour market and other factors, individual occupations are not in demand and institutions are unable to attract an adequate number of students to supply the appropriate number of workers. 6) there is duplication, often unjustified, of the training for occupations in various educational institutions in one city. 7) in recent years the number of graduates for the tertiary sector (cooks, hairdressers/hair stylists) has grown, and their number simultaneously dropped for the traditional sectors of the region. 8) the regional distribution of graduates of educational institutions is closely linked to the demography of the towns where these educational institutions are located.

A comparative analysis of the number and structure of vacancies as of 2019 against the number of graduates of educational institutions makes it possible to determine the tentative match of the curriculum with labour market needs. Thus, the number of vacancies in mining industry significantly exceeds the number of appropriate graduates. The situation is the opposite in railroad transport and in construction industry: the number of graduates is almost double that of the vacancies. There is an approximate parity between the number of graduates and the probable number of vacancies in agriculture and in metallurgy. A similar situation can be observed at the level of individual occupations. A substantial excess of demand over supply has developed in labour occupations such as "underground miner, underground electrical technician" and "electric technician." At the same time, supply significantly exceeds demand in the training of cooks and painters. However, this situation is explained by the fact that the number of vacancies has only been determined for primary employer companies.

The main issues with the development of professional education system of Donetsk oblast were determined by a comprehensive analysis, involving a review of the changes that occurred there in recent years, interviews with educational institutions senior management representatives, surveys of students, teachers, and supervisors of on-the-job training. Issues identified included:

1. Outdated infrastructure, which prevents the provision of quality training to workers in the light of modern requirements and internationalization process in education. Thus, updating of infrastructure is one of the priorities for improving the quality of education services provision at institutions.

2. Lack of proper conditions for students to study, live, and enjoy recreation. Most educational buildings and workshops are in need of renovation, heat insulation, window replacements, etc.

3. Dropping numbers of students and graduates.

4. The unresolved issue of employment and wages for students during their apprenticeship. Apprentices receive 50% of their wages at large companies, in accordance with existing arrangements. Another 50% goes to educational institutions, which allows them to at least partially support their current needs.

5. Duplication of the same training programmes at several institutions often located in one city. First of all, this concerns popular occupations such as "cook, pastry chef," "hairdresser, manicurist," "food salesperson," and "wheeled vehicle maintenance technician." In fact, students are trained in these occupations without any regard to the real needs of the labour market.

6. The imbalance between the development of the labour market and the educational services market leading to an over-saturation of the labour market with skilled workers of certain occupations and shortages of others. A review of labour market vacancies shows almost no need for all the cooks and hairdressers that are trained in such abundance at several institutions in the oblast.

7. The mismatch of education curricula with the labour market demand. It would be most effective to have an apprenticeship in the summer for working occupations, in particular for cooks, partly for builders, tractor drivers, for some other occupations.

8. Paternalism and unwillingness to change among senior management, teachers, and supervisors of professional training. Over 38% of education institution managers and almost 37% of teachers and supervisors of professional training believe that their institutions should be upgraded exclusively at the expense of the state budget.

9. The diminishing prestige of professional education now observed in many regions of Ukraine. Young people of today aim for standards of living that significantly differ from those of their parents. Today, working in mines or at large companies in difficult environmental conditions is not attractive to young people. Low wages, lack of job security, opportunities to find work abroad, and other factors reinforce this unwillingness.

Conclusions. As the result of the research a general system of measures for reforming professional education in the region within the context of internationalization process has been developed.
including mechanisms that would operate at both the national and regional levels (URL: https://www.atlantis-press.com/proceedings/ictvet-18/55913960.). Those include:
1. To align the real needs of the labour market with the curricula of the regional education institutions, based on an improved methodology for determining workforce vacancies. At present there is an excess of vacancies over the number of graduates in the mining industry and in electrical production, and a certain surplus of trained workers in the service and catering sector. The dynamic with the number of graduates is the opposite. However, it is difficult to objectively assess how the curricula match the needs of the labour market because of shortcomings in the vacancies methodology.
2. To improve the mechanisms of employment for graduates, first of all, through the signing of agreements with companies that would guarantee employment. Resolving this issue is important both to ensure the proper functioning of the institutions and to create a positive image of professional education.
3. To encourage employers to participate in training workers. It is important to involve in the process not only large companies but also representatives of small- and medium-sized enterprises, small companies, possibly NGOs and business associations. At the regional level, within the framework of socially responsible business, it is necessary to develop a system of preferences for SMEs in relation to employment and apprentice remuneration.
4. To stimulate educational institutions to further introduce the dual form of training. That will significantly improve the possibility to take practical training in summer period. Those include:
- Those industries where the curricula match the needs of the labour market;
- Enterprise, industrial robot operator, construction carpenter, façade worker, electric equipment technician, lifting machine operator, mechanic of technical systems in buildings, communications network installer, industrial robot operator, etc.
5. To align the areas of training of professional personnel and educational specialization of institutions, and to eliminate duplications of occupations at several institutions in one city.
6. To activate and diversify work on the rapid changes in the labour market because of shortcomings in the curricula match the needs of the labour market.

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