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DUAL FORM OF EDUCATION WITHIN THE FRAMEWORK OF CONTEMPORARY EDUCATIONAL TRENDS IN UKRAINE

As a result of the reforms carried out in our society, great changes are taking place in the education system. Taking into account the prospects and priorities of the economic development, modern equipment and technological trends, the urgent problem is the fundamental improvement of the quality of personnel training necessary for the industries and sectors of the economy. Existing work experience of an employee is highly valued by companies, so its absence is the main obstacle for those who are looking for a job for the first time. Many young people fall into a vicious circle: they cannot find their first job, cannot get a job, because they do not have work experience. The practice of mentoring has a large-scale impact on promoting youth employment and is one of the main reasons for reducing youth unemployment.

Purpose. The main goal of the research is to study the peculiarities of the organization of the educational process in the conditions of dual education of students.

Methodology. Research methods can be divided into two categories – theoretical ones: systematic analysis, synthesis, generalization, analysis of philosophical, pedagogical, psychological, methodological and technical issues related to the research problem, and experimental ones: observation, conversation, monitoring, survey and testing, pedagogical experiment. Innovative methods are introduced into the research process; they are used during lectures, seminars, practical classes, business games, projects, simulation modeling of problem situations, thematic conferences with the participation of employers. Despite certain shortcomings, the dual system of training is one of the successful models of cooperative training and production, which can be used as an innovative type of organization of targeted training.

Findings. The work considers the main aspects of the organization of specialist training in the conditions of interaction between educational institutions and enterprises. After all, the organization of the training process at the enterprise according to the dual form of obtaining education is aimed at the formation of special knowledge, abilities and skills necessary for the performance of qualified professional activities.

Originality. The authors considered the concept of the development of the system of dual-form education in Ukraine in modern conditions, which takes into account the historical chronology of the formation of this process, formalizes individual stages and initiates the principles of planning the future development of this domestic system in institutions of higher education.

Practical value. The results of this study can be applied by scientific and pedagogical teams of educational institutions of higher and vocational education, as well as by representatives of employers who implement a dual education system.

Keywords: *higher education, dual education, jobs, labor market, competitive professionals*

Introduction. The system of education based on the dual form of education has shown its effectiveness for education, business and education seekers both abroad and in Ukraine. Currently, the third year of the pilot project, which was organized by the Ministry of Education and Science of Ukraine to develop models of the dual form of education, is ending. The results of such a project were largely influenced by quarantine restrictions and the introduction of martial law due to the large-scale armed invasion of the Russian Federation into Ukraine. Therefore, the dual form of obtaining education has not lost its relevance, and employers and educational institutions are trying to restore cooperation: whereas in 2020, 44 institutions initially participated, as of the end of 2021 – 79, and as of the end of 2022 – 156 institutions of higher education [1].

After all, the modern world changes so quickly that young people, entering an educational institution, graduate from it and enter a completely different technological world, which has changed beyond recognition during the 4 years of their studies. Of course, teachers of higher education institutions do not always have time to follow these trends, and students graduate with not the most up-to-date knowledge.

Literature review. In the last decade, the technology of the dual form of education has attracted the attention of scientists, managers and scientific and pedagogical workers of higher education institutions, as well as employers interested in specialists prepared taking into account the specifics of a certain industry and a specific organization/enterprise.

The formation and development of dual education, as well as the experience of implementing the dual form of education in institutions of higher education, are explored in the works by various Ukrainian scientists and specialists. O. Buchynska, O. Davlikanova, I. Lylyk, A. Chaikovska, and O. Yashkina devoted their work to the analysis of the results of the pilot project, which is being implemented in accordance with the Order of the Ministry of Education and Culture of Ukraine dated 10.15.2019 No. 1296 “Regarding the introduction of the pilot project in vocational pre-university and higher education institutions education for the training of specialists according to the dual form of obtaining education” [2]. L. Krymchak emphasized the need to study the specifics of the dual education system as a condition for quality training of competitive graduates of higher education institutions for the labor market [3]. L. Slipchysyn highlighted the experience of teaching professional disciplines during the training of teachers of professional education in the conditions of the dual form of education [4]. Dovgenko Ya., Yaremenko L. and Yaremenko Yu.

determined the advantages and risks of implementing dual education in higher education [5].

Definitions of the dual form of education proposed in publications on the relevant subject emphasize the dual nature of the process of professional training, which involves the equal and interconnected participation of a higher education institution and an enterprise or other specialized organization.

The experiment on the implementation of dual education in Ukraine is aimed at improving the policy of ensuring the quality of higher education through the development of cooperation between higher education institutions and employers regarding the formation of educational programs and standards of higher education in response to the demands of the labor market [6].

In general, the regulatory and legal field of Ukraine contains a number of definitions regarding the dual form of education.

Thus, in the Law of Ukraine "On Education" dated 09.05.2017 No. 2145-VIII "Dual form of education is a method of education that involves the combination of education of persons in educational institutions (at other subjects of educational activity) with education at the workplaces of enterprises, institutions and organizations to acquire a certain qualification, usually on the basis of a contract" [7].

In the Order of the Ministry of Education and Science of Ukraine "On the approval of the Regulation on the dual form of obtaining professional (vocational and technical) education" dated December 12. No. 1551 of 2019 "Dual form of obtaining professional education (dual form of obtaining education) is a method for obtaining professional education, which involves the combination of training of persons (hereinafter referred to as education seekers) in educational institutions with training at workplaces at enterprises, in institutions and organizations (hereinafter referred to as business entities) to acquire appropriate qualifications on the basis of an agreement on obtaining professional education in the dual form" [8].

And in the Law of Ukraine "On Higher Education" dated December 18, 2019, No. 392-IX "Dual form of obtaining higher education is a method for obtaining education by full-time students which involves training at the workplace of enterprises, institutions and organizations for the acquisition of a certain qualification in the amount of 25–60 % of the total amount of the educational program based on the contract. Training at the workplace involves the performance of job duties in accordance with the employment contract" [9].

Results. Until 2014, the use of dual education programs in education did not have a systematic approach, but there were certain relationships between educational institutions and employers regarding the comprehensive training of specialists at the level of individual branches within the framework of the legislation in force at that time. With the aim of introducing a full-fledged form of dual education in Ukraine, creating a regulatory and legal framework and unifying the methodology, in 2013, with the support of the Ministry of Education and Science of Ukraine, the adaptation of German experience in the field of dual education to Ukrainian conditions was started as part of the project of the Representative Office of the Foundation named after Friedrich Ebert in Ukraine in partnership with the Ukrainian Marketing Association, individual educational institutions and employers. In 2014, twelve pilot projects were created to integrate elements of dual education into educational programs of the 1st and 2nd levels of higher education, and a Roadmap for the implementation of dual education in Ukraine was developed [10].

In accordance with the order of the Ministry of Education and Science of Ukraine dated March 16, 2015 No. 298 "On the implementation of elements of the dual system of education in the professional training of qualified workers" from 2015 to 2018, an experiment was carried out in 52 vocational education institutions in all regions in 54 professions for the sake of fruitful cooperation of educational institutions with

employers in order to expand the list of labor professions for which training is carried out using the dual form of education.

Following the example of vocational education institutions, in 2019 an experiment was started on the implementation of the dual form of education in institutions of professional pre-higher and higher education in accordance with the order of the Ministry of Education and Science of Ukraine dated 15.10.2019 No. 1296 "Regarding the introduction of a pilot project in institutions of professional pre-higher and higher education on the training of specialists on the dual form of obtaining education". This project was supposed to last until 2023, but the war prevented its full implementation [11].

During the experiment before the start of Russia's military invasion of Ukraine, there was competition among educational institutions in some areas for the companies of employers – market leaders, since they were the ones who could offer education seekers a greater number of tripartite contracts, better conditions for practical training, a higher level of monetary remuneration and opportunities for career growth in the company. Unfortunately, due to the martial law in the country, it is difficult to assess the willingness of employers to continue their participation or join the experiment.

To date, there are no separate dual educational programs or dual institutions of higher education in Ukraine, and most employers are not ready to take applicants for practical training from the first year. In this regard, university students are transferred to the dual form of education, having studied for some time on a full-time basis under a regular educational program. At the same time, not everyone who wishes can switch to the dual form of education, but only those who prove themselves during training and practice. Partner companies look closely at applicants during their industrial or pre-diploma internship (for bachelors who express a desire to study at a master's degree under the dual form of education), attestation, defense of scientific works, participation in trainings and competitions. Also, the recommendations of the educational institution and the results of the student's implementation of the curriculum of previous years play an important role in the selection of participants of the program for the dual form of education. However, the main criterion for an education seeker's transition to the dual form of education should be personal interest and motivation in combining theoretical education with industrial training in order to gain professional experience.

Legally, the transition of education seekers to the dual form of education is confirmed by the signing of tripartite agreements, which are a tool for clearly regulating the rights and obligations of the educational institution, the employer company, and the student in the process of achieving the planned learning outcomes during the fulfillment of labor duties by the education recipient.

Unfortunately, during the experiment, there were cases of early termination of contractual relations in the field of dual education. At the same time, the number of cases of termination of tripartite contracts at the request of the applicants is seven times greater than the number of cases of termination of the latter at the initiative of employers.

As noted in the survey by the applicants [12], the reasons for terminating contracts were:

- improper organization of the dual form of education, which makes it impossible to organically combine theoretical education with practical training;
- lack of understanding of the essence of the dual form of obtaining education by employers, which consists in the integration of the processes of academic training in an educational institution and training in a company (work according to a specialty) with the aim of achieving the programmatic results of training, and not in the creation of parallel, unrelated processes;
- overloading the applicant with responsibilities at the workplace.

For their part, employers cited the following reasons for terminating contractual relations [13]:

- non-fulfilment of professional duties by the applicant and violation of labor discipline;
- dissatisfaction of applicants with the direction (field) of activity;
- low stress resistance and unpreparedness of applicants for real work;
- low level of self-organization and discipline of youth.

Taking into account the non-standard and unpredictable conditions of the national experiment on the introduction of the dual form of professional pre-higher and higher education (two years of the COVID-19 pandemic and already one and a half years of martial law on the territory of Ukraine), the information and analytical campaign among the project participants was not carried out in full. Along with the lack of comprehensive methodical and informational materials, this has led to an incomplete understanding by enterprises of the list of tasks facing them as partners in the organization of training in the dual form of education. Also, bureaucratic procedures for signing bilateral and tripartite agreements hinder the rapid establishment of relations between the participants of the experiment. Some educational institutions and employer companies do not want to sign tripartite contracts for the sake of one or two applicants. This especially applies to enterprises where students already work. In practice, this approach is reduced to the applicant attending classes in his/her spare time without real coordination of the actions of the parties. This form of implementation of dual education only harms the participants, because it does not provide an opportunity for an appropriate combination of theory and practice and full control of the student's implementation of the individual curriculum according to the dual form of education.

For both regular and dual forms of higher education, educational institutions develop an individual curriculum and appropriate methodical support of educational components, which should ensure the proper duration of theoretical and practical training.

Schematically, the educational process according to the dual form of education and the relationship between the educational program and the professional standard are presented in Fig. 1.

The results of the conducted research show that more than six surveyed educational institutions proved a full or partial connection between the topics and tasks that students receive in the company [13]. Interviewed dual-educators noted that sometimes they simply perform work functions in the company. Taking this into account, the issue of connecting the theoretical and practical components of the educational program is of primary importance for the development of the dual form of education.

Methodical support and tools for practical training of education seekers should be provided not only by educational institutions, but also by companies through the development of training programs at workplaces. Large companies that have many years of experience in organizing internships for students, as a rule, have such programs. They can be replaced by some internship programs and training programs developed by companies to hire new candidates or improve the qualifications of already working professionals.

Control over the implementation of the individual curriculum, evaluation of results and attestation of applicants for the

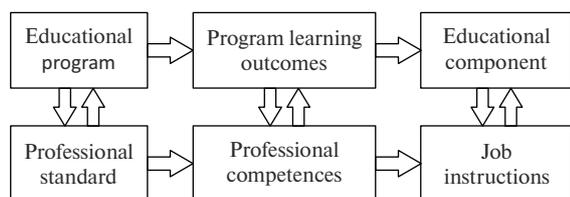


Fig. 1. Scheme of the educational process according to the dual form of education

dual form of education is carried out by the educational institution together with the enterprise in accordance with the Regulation on the organization of the educational process in the educational institution and the requirements of the educational program. According to the survey of the participants of the national experiment on the introduction of a dual form of education [12], partner companies participate in the current and final control of the training results of the students in almost half of the mentioned cases. Control measures can be an oral interview of applicants, written characteristics of their activities at the workplace, participation in the work of the examination committee during the defense of final theses or taking exams, reviewing coursework and graduation papers, compiling information on the success of applicants, which are then transferred to the educational institution.

The scheme of relationships between the persons who provide education for the acquirer according to the dual form of obtaining education is presented in Fig. 2.

Currently, the legislation does not require the creation of a separate structural unit in an educational institution which should be responsible for the implementation and organization of dual education; however, the practice of certain educational institutions proves the effectiveness of this approach. Thus, as of 2021, dual education centers have been established in five institutions of higher education. In other universities, the functions of coordination of dual education are performed by various structural subdivisions [2].

In the conditions of the intensive development of digital technologies, posting information about the dual form of education on the website and social media pages of the educational institution is a prerequisite for raising the awareness of students and their parents about the new form of education, as well as attracting the attention of employer companies for the purpose of cooperation. The analysis of the websites of educational institutions participating in the experiment showed the difficulty of finding information about dual education on the websites of most of them, because the necessary information is not placed on a separate page, but in different sections. The placement of the approved Provisions on dual education on their websites by all researched institutions of higher education, as well as the presence of many of them with a list of partner employers and specialties for which training is carried out in a dual form of education, deserves a positive assessment.

Due to its relative novelty, the issue of financial settlements is not only not included in the basis of a tripartite agreement – all parties to the dual form of education process are awaiting settlement or official interpretation.

Unfortunately, most of the partner companies do not assess the additional costs and effectiveness of their participation in the pilot project related to the training of students using the dual form of education. Therefore, the development of a methodology for determining the effect of practical training of education seekers under a dual form of education would be an additional incentive to attract employers to participate in similar projects.

But since the beginning of the full-scale aggression of the Russian Federation against Ukraine, there has been a real “personnel famine” in companies operating on the territory of

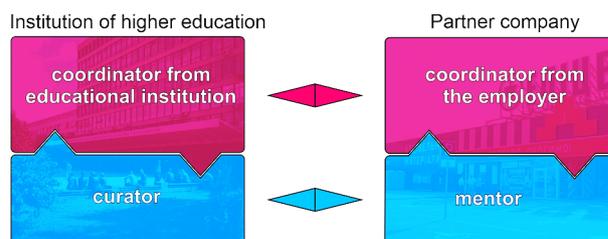


Fig. 2. Interaction between representatives of the higher education institution and the partner company

Ukraine. And companies can no longer insist on the priority of acquiring practical skills over the theoretical component.

The issue of the company's payment of monetary rewards to those who study under the dual form of education requires comprehensive consideration and settlement.

The education seeker, on the one hand, wants to receive an ordered and paid (under a contract or at the expense of budget funds) educational service, which includes a theoretical component and a practical one. And, on the other hand, to receive a reward from the partner company for, actually, working time, which, in turn, is simultaneously a process of acquiring practical skills during the educational process. The implementation of the dual form of education is fully revealed only in the senior years, when the applicants already have theoretical knowledge, so the applicant wants to complete the learning process simultaneously with the prospect of career growth in the company.

Contractual relations with the employer provide for periodic payments of monetary compensation to the student of education in the stipulated amount. According to analytical reports [12, 13], monetary payments to acquirers were made mostly once a month, although some companies did it once a week or once every two weeks. Also, cases of hourly payment were found among students of institutions of professional preliminary higher education. The low level of monetary remuneration noted by the students of education currently tops the list of reasons for termination of employment at the enterprise after completion or during training [14].

Employers, educational institutions and students see that there is a future in the dual form of education, evaluating it as a modern and progressive form of education. Undoubtedly, the national context requires the adaptation of foreign experience to the realities of the Ukrainian economy, but it is the dual form of obtaining education that creates the best conditions for establishing parity relations, finding compromises and meeting the needs of the parties, because the number of partner enterprises declared by educational institutions increased to 34 in 2022 % compared to previous years. However, starting from the II semester of 2022, obstacles and problems arose on the way to the implementation of dual education in connection with the full-scale invasion of the Russian Federation into Ukraine. During the first months of the war, the participants of the experiment were not fully trained in Kyiv, Zhytomyr, and Chernihiv regions. And in Mykolaiv, Zaporizhzhia, Sumy, Kharkiv and Kherson regions, dual education was either not implemented at all, or partially implemented.

After studying the territorial component of enterprises that stopped training students under the dual form of education due to the war [15], it was found that Zaporizhzhia, Vinnytsia, and Kharkiv regions of Ukraine experienced the greatest losses of large and medium-sized business partner enterprises in the training of students studying under the dual form of education (Fig. 3).

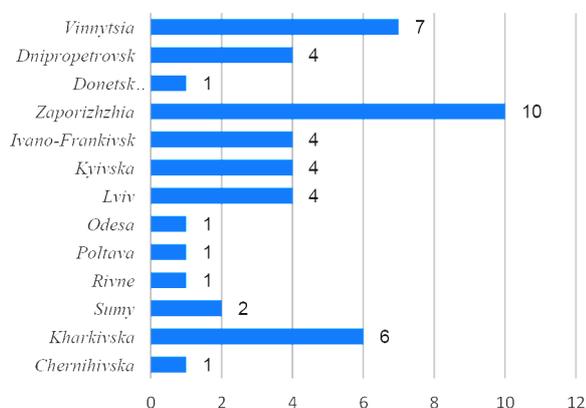


Fig. 3. The number of enterprises that stopped training students in the dual form of education due to the war (Compiled by the author on the basis of materials [15])

Also, the enterprises were forced to reduce the number of students of dual form of education by 35 % with the beginning of the war, mainly due to their relocation to another region/country of residence.

The study on the content and direction of dual education in Ukraine showed a change in recent years of partner enterprises in the rating of the number of applicants for dual education from technical fields (mining enterprises, chemical, machine-building, etc.), to enterprises producing software and educational institutions. primary and secondary education. Since it is the students of education who act as a connecting element in tripartite relations, the results of their survey gave an opportunity to evaluate the project implementation process. Differences in the organization of the dual form of education in various specialties were found in the four researched educational institutions. That is, in one and the same institution, students in some specialties studied in compliance with the conditions corresponding to the dual form of education, while in others, on the contrary, a formal attitude to education was observed. There were also rare cases when the interviewed applicants did not know the topic of dual education at all, although they formally studied in this form.

The majority of educational institutions, despite all the difficulties and problems, still implemented the dual education project to one degree or another in the 2021–2022 academic year [1].

It should also be noted that there are cases when enterprises and educational institutions replace the concepts of a dual form of education, when a tripartite contract on the dual form of education for a year is concluded with the student, and in fact he/she is offered to undergo a practice of several weeks or a month without monetary compensation.

The company “Epicenter K” is one of the country’s retail leaders and one of the largest employers in Ukraine. Developing the direction of work with educational institutions since 2019, the company has concluded 52 agreements and memorandums on cooperation with educational institutions. Thus, the company has become the largest practice base for students from all over the country. In 2022, 1500 students completed internships at the company in remote and offline formats. In 2023, by the end of July, 1700 students had already completed internships at the company, and by the end of 2023, the company plans to involve more than 3000 students in internships. The purpose of this program is to popularize the company among the student and academic community, as well as to employ students in the company.

The analysis of the results of the internship conducted by the company showed that only 5 % of students are employed in the company after its completion. The main reasons for students’ rejection of employment are the difficulty of combining work and study, the lack of support in the matter of employment from parents due to the lack of a clear and transparent mechanism of interaction between the educational institution and the employer, the lack of support from the teachers of educational institutions, who require physical presence at lessons and make it difficult to take exams due to their being absent from some of them.

The analysis of similar projects implemented by other enterprises in the industry revealed that the classic dual form of education, due to a number of limitations and peculiarities, is not effective for the enterprise either. The dual form of education is unattractive due to the complication of planning the working hours of the student and the employees of the unit in which the student works, the increased load on the student, which reduces his efficiency at the workplace, the “manual” exchange of information between the company representative and the educational institution, a complex schedule of students’ work at the workplace, complex planning of the workload of the employer’s staff due to the periodic absence of a student employee at the workplace.

In July 2022, Kyiv National University of Construction and Architecture proposed to expand cooperation and intro-

duce the dual form of education. For its part, the educational institution emphasized flexibility in the organization of the dual form of education and readiness to adapt educational programs to the needs of the employer.

Considering the urgency of the problem, exceptional conditions in the labor market of Ukraine (full-scale invasion of the Russian Federation in Ukraine), a Memorandum of Cooperation was signed on September 21, 2022 between the limited liability "Epicenter K" LLC and Kyiv National University of Construction and Architecture.

The initiative and support of specialists of Kyiv National University of Construction and Architecture made it possible to start a pilot implementation of a dual form of education at the company "Epicenter K". So far, 5 students are participating in the project, who expressed a desire to try a new form of education for themselves. Almost simultaneously with the signing of the Memorandum of Cooperation, tripartite agreements were signed between the higher education institution, the employer company and the students. The main goal of the project for the specialists of the educational institution and the department of training and personnel development of "Epicenter K" LLC is to find and develop methodological and technical solutions that would allow the integration of the educational and work process into each other, as well as to optimize the time and resources of all parties.

To this end, in the company's educational platform, specialists in training and personnel development created a separate distance learning course for employees who study in the format of a dual form of education. Among the disciplines are two courses created to facilitate the employee's orientation in the company [16]. These are the courses "Welcome to the company" and "Structure and range of shopping centers". As well as distance courses aimed at studying the company's business processes, such as "Organization, implementation and evaluation of the effectiveness of advertising activities", "Operational activities and project management", "Optimization of business processes", "Fundamentals of competition. 5 forces of M. Porter", "Portrait of the buyer and the tree of consumer decisions", "Methods of product accounting. Calculation of product needs", as well as a whole section of knowledge related to financial indicators and analytics. After completing this basic course, students get access to employee training programs for positions in accordance with the division in which they work.

The study on the intermediate results of the pilot project revealed the need to create a separate discipline, which received the working name "Corporate culture and business communication". The reason for the creation of this discipline is that students who have chosen the dual form of education demonstrate excellent knowledge in their specialties, and at the same time adapt for a long time to intensive work and the rules of internal communication of a large company, which sometimes leads to difficulties in communication with colleagues and managers. Part of the materials of this discipline should be added to the educational programs of the educational institution. The other part goes to the company's internal training courses.

For this, on the company's training platform, specialists in training and personnel development have created a separate training course for employees who are studying in the format of dual education. A curator and a coordinator from an educational institution have also been added to this system. They are granted rights that allow them to independently monitor the progress of students without involving the employer's dual education coordinators in this process.

The next step in synchronizing educational and work processes was the enrollment of the coordinator and teachers at Kyiv National University of Construction and Architecture in corporate training programs. Such a step allowed the specialists of the educational institution to analyze the components of the corporate and own training programs and to adjust or ex-

clude from the training program of the higher education institution the blocks that are duplicated.

Subjects of disciplines that are not presented in corporate training programs and are not available in the format of video recordings in the distance learning system of Kyiv National University of Construction and Architecture were decided to be recorded and taught in the training course of the employer's distance learning system.

The employer provides technical support in the process of video creation and placement in the corporate training platform. They also provide appropriate rights to teachers to control the process and learning outcomes of students studying in the format of a dual form of education.

For the automatic exchange of information between the distance learning systems of Kyiv National University of Construction and Architecture and "Epicenter K" LLC, the company's specialists add a separate field "Education ID" to the user profile in the employer's educational platform, which duplicates the student's unique identifier from the distance learning system of the educational institution. According to this identifier, information about the student's success in the programs of the educational institution is imported into other fields of the profile. This enables the HR specialists of the company to monitor the progress of their employee and include him/her in programs for the development of the personnel reserve.

The solutions worked out in the pilot project with specialists of Kyiv National University of Construction and Architecture were formalized by the specialists of the Department of Training and Personnel Development in the Regulation on the organization of practical training of students of educational institutions using a dual form of education at "Epicenter K" LLC, and approved by the General Director of "Epicenter K" LLC. This package of documents will become the basis for the employment of students under the dual form of education in all shopping centers of the network, as well as increase the number of employed students from a few people to hundreds every year.

Conclusions. The wide implementation of a dual form of education is obvious and necessary due to the fact that the country's economy needs qualified specialists in economic and labor professions, and therefore all the forces of the Ministry of Education and Science as a whole, Kyiv National University of Construction and Architecture and LLC "Epicenter K" in particular, aimed at the implementation of this project. Summarizing the work, it should be noted that employers and heads of educational institutions are ready to cooperate in the field of implementation of a dual form of education. The experience of cooperation between Kyiv National University of Construction and Architecture and "Epicenter K" LLC shows that we are moving in the right direction.

Thus, on the basis of the conducted research, the following conclusions can be drawn: first, the concept of a dual form of education is different from the traditional one and is aimed at strengthening the practical orientation of training specialists; secondly, such a system ensures the training of highly qualified specialists in demand by enterprises in various fields of activity; thirdly, the dual form of obtaining an education is an effective mechanism for the development of competence, which will ensure an informed choice of profession; fourthly, this system can ensure the highest level of employment of graduates, since the latter fully meet the requirements of the employer.

References.

1. Buchynska, O., Davlikanova, O., Ishchenko, T., Lylyk, I., Chai-kovska, A., & Yashkina, O. (2022). *Analytical report on the results of the third year of the pilot project, which is implemented in accordance with the Order of the Ministry of Education and Culture of Ukraine dated 15.10.2019 No. 1296 "Regarding the introduction of a pilot project in institutions of vocational pre-higher and higher education for the training of*

specialists using a dual form of education”. Kyiv: LLC “Vistka”. ISBN 978-617-7574-72-8.

2. Verkhovna Rada of Ukraine (n.d.). *Decree of the Cabinet of Ministers of Ukraine “Strategy for the development of higher education in Ukraine for 2022-2032”* No. 286 (2022 February, 23). Retrieved from https://zakon.rada.gov.ua/laws/show/286-2022-p?find=1&text=дуальна+о+свита#w1_3.

3. Verkhovna Rada of Ukraine (n.d.). “On education”. *Law of Ukraine dated September 5, 2017 No. 2145-VIII*. Retrieved from <https://zakon.rada.gov.ua/laws/show/2145-19>.

4. Verkhovna Rada of Ukraine (n.d.). “On the approval of the Regulation on the dual form of obtaining professional (vocational and technical) education.” *Order of the Ministry of Education and Science of Ukraine dated December 12, 2019 No. 1551*. Retrieved from: <https://zakon.rada.gov.ua/laws/show/z0193-20>.

5. Verkhovna Rada of Ukraine (n.d.). “On higher education”. *The Law of Ukraine dated December 18 2019. No. 392-IX*. Retrieved from: <https://zakon.rada.gov.ua/laws/show/1556-18>.

6. Kulalaieva, N., & Leu, S. (2019). Work-based learning involving the dual education elements. *Scientific herald of the Institute of vocational education and training of NAES of Ukraine. Professional Pedagogy*, 1(18), 162-168. <https://doi.org/10.32835/2223-5752.2019.18.162-168>.

7. Novikov, V.M., Karyain, Yu.O., & Chernichenko, V.V. (2020). Dual education: institutional features of implementation in Ukraine. *Institute of Demography and Social Research named after M. V. Birds of the National Academy of Sciences of Ukraine*. Kyiv-Warsaw. ISBN 978-966-02-9072-3.

8. Buchynska, O.V., Davlikanova, O.B., Lilyk, I.V., & Yashkin, O.I. (2020). *Analytical report “Opinions of applicants on dual education” based on the results of research on the awareness of applicants on the dual form of education and the experience of participants in the pilot project on its introduction at the level of professional pre-higher and higher education in Ukraine.* Kyiv. ISBN 978-617-7283-44-6.

9. Buchynska, O.V., Davlikanova, O.B., Lilyk, I.V., Yashkin, O., & Perevozova, I. (2020). *Analytical report “Opinions of employers on dual education” based on the results of a study of employers’ awareness of dual education and experience of participation and experience of participation in a pilot project on its introduction at the level of professional pre-higher and higher education in Ukraine.* <https://doi.org/10.13140/RG.2.2.33645.87523>.

10. Buchynska, O., Davlikanova, O., Ishchenko, T., Lylyk, I., Chaikovska, A., & Yashkina, O. (2021). *Analytical report on the results of the second year of the pilot project, which is implemented in accordance with the Order of the Ministry of Education and Culture of Ukraine dated 15.10.2019 No. 1296 “Regarding the introduction of a pilot project in institutions of professional pre-higher and higher education for the training of specialists using a dual form of education”*. Kyiv. ISBN 978-617-7574-49-0.

11. Davlikanova, O., Ishchenko, T., & Chaikovska, A. (2020). *Analytical report on the results of the first year of the experiment on the implementation of a pilot project in institutions of vocational pre-university and higher education for the training of specialists using a dual form of education in accordance with the order of the Ministry of Education and Culture of October 15, 2019 No. 1296 “Regarding the introduction of a pilot project in institutions of vocational pre-university and higher education education for the training of specialists according to the dual form of education”*. <https://doi.org/10.13140/RG.2.2.15924.94084>.

12. Bugaichuk, V., Davlikanova, O., & Lylyk, I. (2022). *Ontology of dual education: the experience of Germany and Ukraine*. Kyiv: LLC Vistka. Retrieved from https://mon.gov.ua/storage/app/media/news/2023/03/10/Ontologi_book-6.03.23.pdf.

13. *Order of the Ministry of Education and Culture “Regarding the introduction of a pilot project in vocational pre-university and higher education institutions for the training of specialists using a dual form of education”* No. 1296. (2019, October, 15) Retrieved from <https://mon.gov.ua/storage/app/uploads/public/5dc96748213fc874879880.pdf>.

14. Verkhovna Rada of Ukraine (n.d.). *Decree of the Cabinet of Ministers of Ukraine “On the approval of the Concept of training specialists using a dual form of education”* No. 660-r (2018, September, 19). Retrieved from <https://zakon.rada.gov.ua/laws/show/660-2018-%D1%80#Text>.

15. Rayter, G., & Davlikanova, O. (2017). Introduction of Dual Education in Ukrainian Higher Educational Establishments and Approaches to Estimation of its Economic Benefits. *Business Ethics and Leadership*, 1(4), 93-101. [https://doi.org/10.21272/bel.1\(4\).93-101.2017](https://doi.org/10.21272/bel.1(4).93-101.2017).

16. Yudicheva, O., Bondar-Pidhurska, O., Glebova, A., Alaverdian, L., Romanenko, O., & Kovalchuk, Y. (2023, May, 04–06). Practical Application of Information and Communication Technologies in Ukraine Higher Education Institutions Under the Conditions of the Development of the Digital Economy: Generalisation of Experience,

IEEE International Conference on Smart Information Systems and Technologies (SIST), (pp. 129-134). Astana, Kazakhstan. <https://doi.org/10.1109/SIST58284.2023.10223579>.

Дуальна форма здобуття освіти в контексті сучасних освітніх тенденцій України

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У результаті реформ, що проводяться в нашому суспільстві, великі зміни відбуваються і в системі освіти. Ураховуючи перспективи та пріоритети розвитку економіки, сучасну техніку й технологічні тенденції, актуальною проблемою є кардинальне підвищення якості підготовки кадрів, необхідних для галузей і секторів економіки. Наявний досвід роботи у працівника високо цінується компаніями, тому його відсутність є основною перешкодою для тих, хто вперше шукає роботу. Багато молодих людей потрапляють у замкнуте коло: вони не можуть знайти першу роботу, не можуть влаштуватися, бо не мають досвіду роботи. Практика наставництва має масштабний вплив на сприяння працевлаштуватися молоді та є однією з основних причин зниження рівня безробіття серед молоді.

Мета. Основною метою дослідження є вивчення особливостей організації навчального процесу в умовах дуальної навчання студентів.

Методика. Методи дослідження можна розділити на дві категорії – теоретичні: систематичний аналіз, синтез, узагальнення, аналіз філософських, педагогічних, психологічних, методологічних і технічних питань з проблеми дослідження, і експериментальні: спостереження, бесіда, моніторинг, опитування й тестування, педагогічний експеримент. У дослідницький процес упроваджуються інноваційні методики, що використовуються під час лекцій, семінарів, практичних занять, ділових ігор, проєктів, імітаційного моделювання проблемних ситуацій, тематичних конференцій за участі роботодавців. Незважаючи на певні недоліки, дуальна система навчання є однією з успішних моделей кооперативного навчання й виробництва, що може бути використана як інноваційний вид організації цільового навчання.

Результати. У роботі розглянуті основні аспекти організації підготовки фахівців в умовах взаємодії закладів освіти та підприємств. Адже організація процесу навчання на підприємстві за дуальною формою здобуття освіти спрямована на формування спеціальних знань, умінь і навичок, необхідних для виконання кваліфікованої професійної діяльності.

Наукова новизна. Авторами розглянута концепція розвитку системи дуальної форми здобуття освіти в Україні в сучасних умовах, що враховує історичну хронологію становлення даного процесу, формалізує окремі етапи та започатковує засади планування перспективного розвитку цієї вітчизняної системи у закладах вищої освіти.

Практична значимість. Результати цього дослідження можуть бути застосовані науково-педагогічними колективами навчальних закладів вищої та професійно-технічної освіти, а також представниками роботодавців, які впроваджують дуальну систему навчання.

Ключові слова: вища освіта, дуальна освіта, робочі місця, ринок праці, конкурентоспроможні фахівці

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