Ключевые слова: сельские территориальные общины, домохозяйства населения, индекс развития, стратегия, долгосрочный план действий.

Саблук Пётр Трофимович - доктор экономических наук, профессор, академик НААН, академик-секретарь Отделения аграрной экономики и продовольствия, Национальная академия аграрных наук Украины (г. Киев, ул. М. Омельяновича-Павленко, 9)

E-mail: pd@iae.kiev.ua

Кропивко Максим Михайлович – доктор экономических наук, заместитель академика-секретаря Отделения аграрной экономики и продовольствия, Национальная академия аграрных наук Украины (г. Киев, ул. М. Омеляновича-Павленка, 9) 5. мей. (п. Киев, ул. М. Омеляновича-Павленка, 9)

E-mail: krop2002@ukr.net

Стаття надійшла до редакції 08.02.2018 р.

Фахове рецензування: 09.02.2018 р.

Бібліографічний опис для цитування :

Саблук П. Т., Кропивко М. М. Особливості стратегічного планування розвитку сільської територіальної громади. *Економіка АПК*. 2018. № 3. С. 5—13.

*

UDC 378.147:338.43(477)

V.S. SHEBANIN, doctor of technical sciences, professor, academician of NAAS

Dual form of education in the training of highly qualified specialists for the agrarian sphere of Ukraine

The purpose of the article is to reveal the essence and significance of the dual form of education in the professional training of highly qualified specialists, taking into account the experience of its implementation in the Mykolayiv National Agrarian University.

Research methodology. In the research process have been used such scientific methods: epistemological, systematic approach, comparative analysis, inductive and deductive approach.

Research results. The essence and significance of the dual form of education in the professional training of highly qualified specialists have been revealed. The peculiarities of introduction of dual education in Mykolayiv National Agrarian University have been highlighted. It has been shown that the introduction of the dual form of education in the training of specialists is the key to improving the quality of training specialists, taking into account the requirements of employers. It has been substantiated that the dual form of education involves the use of the latest scientific achievements, innovations and technologies not only of university science and production and manufacture, but also in the achievements of academic science. The most successful organizational form of cooperation is the educational scientific and production consortium of agrarian higher educational institutions, scientific research institutes and industrial enterprises of Ukraine. It has been verified that the introduction of elements of dual education actually increases the level of practical training of applicants for higher education, forms and develops their professional competencies, promotes the process of adaptation to professional activity, provides a balance between the demand and supply of specialists in the labor market.

Elements of scientific novelty. According to the results of the monitoring of the regional labor market and employers' requests, the need for the gradual reduction of the state order in higher education institutions to the needs of the labor market in the Mykolayiv region and the provisions of agricultural enterprises by qualified specialists, achievement of steady dynamics and consolidation have been determined. There have been identified a number of basic tasks, the solution of which will ensure the agrarian sector of the economy of the Mykolayiv region along with competent personnel capable of organizing high-performance, efficient and resource-saving production in the conditions of innovative development.

Practical significance. The directions of development of the human resources of the agrarian sector of the economy of the Mykolayiv region have been substantiated. It has been proven that it is necessary to take into account the productionoriented training of specialists in the program of the dual form of education, when developing curricula and educational programs. There have been developed measures for the formation of human capital as a strategic resource for the economic

[©] V.S. Shebanin, 2018

growth of the agrarian sector of the Mykolaiv region in the context of the general proposals for the Program of Social and Economic Development of Mykolayiv region for 2018-2020. It has been determined that the introduction of dual education in the training of specialists is a tool of professional socialization of rural youth, giving it the best opportunities for obtaining a prestigious labor market qualification. Figs.: 2. Refs.: 27.

Keywords: dual form of education, agroindustrial complex, university, integration, socialization, professional activity, consortium, personnel potential.

Shebanin Vyacheslav Serhiiovych - doctor of technical sciences, professor, academician of NAAS, rector, Mykolayiv National Agrarian University (9, Heorhiia Honhadze st., Mykolaiv) *E-mail: rector@mnau.edu.ua*

Scientific problem. In terms of rapid development of production technologies, the competitiveness of the agrarian sector of Ukraine depends on the level of specialists' professional training at the world level. The level of development of education and science is a decisive factor in the progress of society, increasing the well-being of citizens, spiritual and intellectual growth. their Therefore, the coordination of the effective use of resources (staff, materials, equipment, and research lands) is determinative for conducting scientific research and technical development at the highest level, as well as for the implementation of measures for the qualitative training of competitive specialists in the relevant sectors of the state economy. The existing legal basis created favorable conditions for the development of the national agrarian education, science and economy of the state. However, the lack of communication between the educational process, science and production, the lack of development of public-private partnerships, outdated material and technical base requires the use of modern approaches in the training of highly skilled professionals. Institutions of education higher provide qualitative knowledge, but graduates lack understanding of technological processes, which they get through the practice, that is, the practical component in the training of specialists is not enough.

Ukrainian companies are increasingly feeling the need for young people with desired skills. We believe that the main ways to solve this problem are:

- Orientation of entrepreneurs on increasing corporate social responsibility of businesses, particularly on the part of professionally oriented training of young specialists (providing a basis for practice, as well as "first place of work");

- introduction of a dual form of education.

Corporate social responsibility of businesses, particularly on the part of professionallyoriented training of young specialists, is real-

ized by such companies as: Nestle in Ukraine, Bayer in Ukraine, Metlife, Singenta, Ukrtelecom, DTEK, EY, KPMG, Deloitte, Kyivstar, Coca-Cola, 1 + 1 Media, Sky Well, Delta M Group, Kreston GCG, Ukrsibbank, Ashan Retail Ukraine, Lerua Merlen, GMS, Eterna Law, Lifecell, ADV Distribution, KEEPSOLID, Kredobank, Enzim, TRK Lviv, Prykarpattyaoblenergo, AGRANAFRUT, Engineering and Technology Company "Automatic Group", "DS" Pharmacy Network, Lvivoblenergo, Concern-Electron, Sumy and Lviv regional administrations of JSC Oschadbank, MINDKEY, Lviv Regional State Administration, IJRRA, State Employment Service. On March 17, 2016, these companies signed the Ukrainian Youth Covenant 2020.

The purpose of the Covenant is to unite the efforts of Ukrainian businesses, and to strengthen the partnerships between those businesses and educational systems throughout Ukraine to solve the problems of employment of young people. The initiative carried out by the CSR Development Center jointly with the Ministry of Youth and Sports of Ukraine and is being implemented within the framework of the European Youth Covenant. The Ukrainian initiative is one of the most active in Europe and today it has united 38 organizations in Ukraine, which have committed themselves to promote the creation of at least 300 partnerships between businesses and the educational sector, and jointly provide 10,000 places for internships and first youth work [16].

A dual mode of learning is a combination of theory in an institution of higher education and practice in the enterprise. This form of education contributes to the greater integration of education, science and business and is widespread in Germany, Austria, and Switzerland.

The need for implementation of the dual form of education in the Ukrainian educational institutions was identified in 2014 during the First International Scientific and Practical Conference Dual Education as a Response to the Challenges Faced by the Modern System of Ukrainian Education, conducted by the Representative Office of the Fund of Friedrich Ebert in Ukraine (FFE) in partnership with the Ukrainian Association of Marketing (UAM) [19]. This event was the first attempt to bring together all stakeholders to develop conceptual approaches to the introduction of dual education at the state level. Adopted by the Ministry of Education and Science of Ukraine in 2017, the concept of training specialists for the dual form of education uses the German experience on this issue [18]. The reform of university education in Ukraine, based on the model of dualism, requires the introduction of conceptual changes in the regulatory framework, taking into account the maximum approximation of educational standards to professional ones. An urgent need is the development and implementation of economic incentives for employers to invest in the practical training of higher education graduates to independent professional activities in their specialty.

recent Analysis of researches and publications. The various aspects of this problem were studied by domestic and foreign scientists, in particular: Blaginina S.[1], Jim Woodhill [3], Y.M. Gadzalo.[4], Dzvinchuk D.[6], Druker P.F.[7], Ishchenko T.D.[9], Mill U.[14], Nikolayenko S. M.[15], Postoyan T.G.[17], Sirenko N.M.[20], Khomenko M.P.[23], Tkachuk O. M. [23] etc. The long discussion about solving the problem of improving the quality of the educational process for the personnel supply of agricultural production of the country proves its importance. At the same time, given the crucial importance of this problem, the introduction of elements of the dual form of education in the preparation of competitive specialists for the agrarian sector of the country, taking into account the requirements of employers, is relevant and determines the need for further scientific research.

The objective of the article is to reveal the essence and significance of the dual form of education in the professional training of highly qualified specialists, taking into account the experience of its implementation in the Mykolaiv National Agrarian University (furthermore known as - the University).

Statement of the main results of the study. Duality, as a methodological characteristic of agrarian education and science, involves the construction of a coherent interac-

tion between educational, scientific and production spheres for the training of specialists of a certain profile, based on a combination of theoretical training and practical skills. Dual study provides the adaptation of higher education graduates through direct interaction between highly effective enterprises and higher education institutions to the first job [18]. Such cooperation is foreseeable by the Strategy for the Development of the Agrarian Sector of the Ukrainian Economy for the period up to 2020[21]. Its successful implementation opens up wide opportunities for the training of highly skilled specialists through the cooperation of agricultural institutions of higher education, research institutions and manufacturing enterprises taking into account all potential opportunities of the region and the country as a whole.

The concept of the development of the Mykolaiv National Agrarian University is based on a systematic analysis of internal and external factors of its development, available potential and capabilities, defines directions for improvement of the main types of activity, taking into account global trends, providing for the implementation of three essential components: educational, scientific and production[11]. This requires the strengthening of the strategic partnership of higher education institutions, research institutions, production enterprises of the agrarian sector for the training of competitive specialists, taking into account the requirements of employers.

The University has implemented a number of organizational measures in order to introduce the dual form of education such as:

- the Training-Scientific-Practical Centre with units in all agro-climatic zones of Ukrainian Steppe has been created for the implementation of effective technologies into production, where university students can get their first job, carry out modern scientific research on agronomy and agro engineering;

- the University in cooperation with the companies of the Industrial Group UPEC ("Lozivski Machines", Ukrainian Design Bureau of Transmissions and Chassis, the Kharkiv National Technical University of Agriculture named after. P. Vasilenko and others) established an Educational-innovation cluster "Agro-technics" to gain experience using modern equipment;

- a modern training park of power equipment paid for by local businesses was created for the practical training of specialists in the field of electric power, electrical engineering and electromechanics;

innovative educational and scientific laboratories "Training Accounting" and "Training Bank" were created to form practical skills and abilities in the field of banking services and accounting;

 a certified soil-agrochemical laboratory was established, which conducts monitoring of soil fertility of the region and provides the first jobs of university graduates;

- the scientific park of Mykolayiv NAU Agroperspetyva was created, in order to introduce into production the latest scientific and technical developments, to prove the choice of technological solutions and full implementation of the Program of Innovative Investment Projects; Integration of Agrarian Education, Science, Production of Mykolayiv NAU.

Implementation of the Program of Innovative Investment Projects "Integration of Education, Science, Production" has enabled to create, in cooperation with business, modern innovative platforms for acquiring practical skills by students on agricultural technology, seed production, irrigated agriculture, etc.

In 2014, with the support of the Israeli company, Irrigator, scientists of the university developed and implemented the project; Modern Drip Irrigation within the fields of Training, Scientific and Practical Centre of the University. This made it possible to carry out works on vegetable crop variety testing from companies such as France, Italy, Spain, Japan, the USA, Israel, the Netherlands, Switzerland (Clause, Nunhems, Singenta, Nickerson-Zwaan, Sakata, Bejo, TaciSeed) for the amount of \$30,000. International Field Days, and Scientific and Practical Conferences were held as a result of the research.

The American company, Monsanto, has invested \$700,000 in the innovative project "Modern Irrigation of the Land of the Scientific-Practical Center of Mykolaiv NAU" for the cultivation of hybrid maize seeds on an area of 277 hectares. On this educational and scientific site, there was practical training on the selection and seeding program of more than 600 university applicants. With the cooperation of leading selection centers of Ukraine such as the Selection and Genetics Institute, the Myroniv Institute of Wheat (named after V.Remeslo, V.Yuryev) the Institute of Plant Production, the Institute of Irrigated Agriculture, the All-Ukrainian Research Institute of Selection, and the Bila Tserkva Breeding and Research Station, gives future specialists an opportunity to master the modern technologies of grain cereal cultivation.

For managers and specialists of agricultural enterprises of the Southern region during 2013-2017, seven International and National Field Days on technology for the cultivation of grain cereal crops, sorghum, and vegetable and melon cultures was conducted on experimental fields of the University. According to the results of crop variety testing, the University published *Winter Wheat Varieties for the Ukrainian Steppe Reference Book*.

As a result, notables such as The Minister of Agrarian Policy and Food of Ukraine, the President of the National Academy of Agrarian Sciences of Ukraine, heads of the Mykolayiv region, heads of departments of Ministry of Education and Science of Ukraine and Ministry of Agrarian Policy and Food of Ukraine, State Institutions of Scientific-Methodical Center "Agroosvita", rectors, and deans of agrarian educational institutions, leading domestic and foreign breeders, scientists and entrepreneurs became familiar with the results of the work on the experimental fields of the University, which were recognized by the Ministry of Education and Science of Ukraine as the best among agrarian higher education institutions.

The dual form of education implies the use of the latest scientific advances, innovations and, technologies not only for university science and production but also for the achievements of academic science. In our opinion, the most successful organizational form of cooperation is Training-Scientific-Production Consortium of Agrarian Institutions of Higher Education, research institutions and manufacturing enterprises of Ukraine. Eight scientific institutions, and institutions of higher education as well as 22 well-known enterprises responded to our proposals on this issue, among which TOV SP Pivdenna Ahrarno-Eksportna Kompaniya (PAEK) (JV Southern Agrarian and Export Company), TOV S-Rostok (LLC S-Rostok), DP DH Rekonstruktsiya (State Research Enterprise Reconstruction), DH Askaniys'ke (Research Enterprise Askaniys'ke), TOV Zolotyy Kolos (LLC Golden Spool), TOV Ahroflahman (LLC Agroflagman), Industrial Group UPEC (Kharkiv). The Minister of Education and Science of Ukraine L. Grynevych,

President of the National Academy of Agrarian Sciences of Ukraine Y. Gadzalo, Head of Mykolayiv Regional State Administration O. Savchenko, and people's deputies took part in the events of the occasion of the signing the Memorandum on the creation of the Educational Scientific and Production Consortium Pivdenny.

The dual form of education has found recognition and support of national producers and the implementation of international cooperation programs. In 2017, Mykolayiv National Agrarian University and the Mennonite Economic Development Association signed a Memorandum of understanding. The practical implementation of the Memorandum was the participation of our university in Ukrainian horticulture business development project (UHBDP).

This grant program is financed by Global Affairs of Canada (GAC) and Mennonite Economic Development Association (MEDA). The purpose of this program is to give an opportunity to university students to gain practical skills at modern agrarian enterprises, to motivate talented young people for employment. The departure days of practical training are the competition "The conducted, best ploughman" is held, the tutorial is published, the exhibition and round tables are organized, the thematic lectures are delivered, and research and practical conferences are held.

Introduction of the dual studies elements in Mykolayiv National Agrarian University showed it greatly improves the university students' practical training level, forms and develops their professional competencies, assists the process of adaptation to their professional activity, provides an equilibrium of specialists in the labor market. Different forms of dual studies are realized at the university level: agrointernship, days of practical training, Days of the Field, conferences, trainings, seminars, round tables, competitions for university students, webinars, meetings, festivals, career and jobs fairs and others.

Enterprises of the region are actively involved in the educational process of Mykolayiv National Agrarian University. Productive structures take direct part in the development of individual curricula and approve the programs of dual studies, working curricula of specialties, graphics of educational process, plans of affairs in ensuring educational process and estimate general and professional university students' competencies. The approved graphics of educational process include the order of theoretical studies on the base of university with practical training in the working conditions. Periodicity of order is different and depends on the program of studies, material and technical base, natural conditions etc.

In 2017 the Educational-scientific Institute of Economy and Management of Mykolaiyv National Agrarian University started a pilot introduction of the dual form of education in training specialists, and university students specializing in Accounting and Taxation signed the agreement with the University and with the well-known Agricultural Partnership South Agrarian-Export Company (Pivdenna Ahrarno-Eksportna Kompanija) regarding dual form of studies lasting for two months in the second term. The students are given positions in their specialty rotating every three weeks in the workplace. Students solve the tasks of analytical-accounting for proper salary, and will work in positions on the company's staff.

The results of our monitoring of regional labor markets and employers' requests showed the necessity of gradual adaptation of state orders in higher educational establishments to the labor market requirements in Mykolayiv region and providing agrarian enterprises with skilled specialists, achievement of stable dynamics and fixing. Necessity of further increase of agrarian production as a real sector of economy, renewal and preservation of personnel, development of regional higher education and science - all of these factors became the groundwork for development by the University on behalf of the head of Mykolaiyiv region council the suggestions to the Program of socioeconomic development of Mykolayiv region in 2018-2020 (chapter "Innovative development of agroindustrial complex in the region") and, in particular, the propositions for forming human capital as strategic resource of the economical growth in agrarian sector of economy in Mykolayiv region (further the Propositions are given). The aim of these propositions is to provide the agrarian sector of regional economy with competent personnel who will be able to organize a highly productive, effective and resources-saving production in the conditions of innovative development. The main tasks for achieving this aim are:

- the development of social partnership and social responsibility of all subjects in the region in the context of providing the development of education, intellectual potential and reproduction of human capital;

involving the potential employers in the educational process;

- creating the flexible training, personnel re-training and advanced training system, in accordance with the necessity of innovative development of industry on the basis of monitoring and strategy of development of rural territories, agroindustrial production, labor market requests;

– providing the regional order of specialists` training who are of great necessity in the region in specialities of: Agronomy, Agroengineering, Electrical Power Engineering, Electrical Equipment and Electromechanics, Accounting and Taxation, Technology of Producing and Processing of Livestock Products, "Finance, Banking and Insurance, Economy, Management, Public Management and Administration, Geodesy and Land Management with the obligatory labor by the graduating student from university and the regional order for no less than three years in rural areas or in urban villages;

improvement of training quality and efficiency of work in fixing the graduating students from higher educational establishments by hiring on terms of targeted training according to the regional order and optimization of adaptation terms of young specialists in the workplace;

 optimization of agrarian education structure by the improvement of education, science and production integration;

 development, working out and the distribution of new forms and technologies of educational activity (distance education, dual studies and others);

- stabilization of material and technical base of professional education and higher educational establishments by involvement of state facilities, regional budget and business structures money for providing with the necessary educational-laboratory equipment and agricultural technique.

The offered directions of skilled potential development in agrarian sector is shown in Figure 1.



Figure 1. The development of personnel potential of the agrarian sector of the economy of Mykolayiv region

* Source: author.

During the development of curricula and educational programs, it is necessary to take into account the production-oriented training of specialists according to the dual form of obtaining education (Figure 2). To approve the possible incentives for entrepreneurs which make a significant contribution to the development of dual education (for example, the cost of training specialists to include to the cost of production) at the legislative level.



Figure 2. Training of specialists in the dual form of education for Mykolayiv region

* Source: author.

The implementation of the Measures was predicated on the principles of public/private partnership of the Mykolayiv Regional State Administration, enterprises, institutions, organizations, and Mykolayiv National Agrarian University, with clear delimitation of powers and responsibility of all participants of the Measures. The main sources of financing of the Measures are the funds of the state and regional budgets, enterprises, institutions, organizations and other investors. The implementation of the measures on formation of human capital as a strategic resource of the agrarian sector of economic growth of the Mykolayiv region economy will promote:

- creation of the system and conditions for the preparation, formation of a new generation of highly educated professionals who have creative thinking, are able to comprehensively solve problems, who can assess the situation and realize sustainable dynamic and breakthroughs in economic development;

- providing the agricultural sector of the region with professional personnel, and focus them on the production;

- reducing of the outflow of skilled personnel from the countryside;

- provisioning by means of a regional order for the return of young people who have received education and training in the countryside;

- raising the educational level of managerial personnel employed in the production;

- increasing the share of qualified managers and specialists in the organizations of economically active age group up to the age of 31;

- improving the quality of training specialists and optimizing the timing of their adaptation in professional activities;

- preservation of regional higher education and science;

- providing support and development of intellectual and creative potential through lifelong education and training.

Thus, the further activity of the Mykolayiv NAU is to continuously improve and consolidate the dual form of education as a strategically important and acting as one of the effective mechanisms for integrating university science and practical training in the learning process. The introduction of dual training in the training of specialists is a means of professional socialization of rural youth giving it the best opportunities for a prestigious job market qualification.

Conclusions.

1. Dual studies ensures the adjustment of equalality in rights partnership of higher eduestablishments, of professionalcational technical education, of employers and of university students with the aim of students gaining the experience of practical use of the theoretical knowledge and their adaptation to the terms of the real professional activity in the fields of economy. Experience of Mykolayiv National Agrarian University proves that introduction of dual education in training specialists is the guarantee of improving the quality of specialists` training while taking into account the employers` requirements.

2. Integration into the European educational space requires stabilization of strategic

Literature

 Благініна С. 3 досвіду Німеччини: забезпечення якості освіти в минулому і в наш час. Вища школа. 2017. № 9. С. 87-99.
Впровадження елементів дуальної освіти в систему ви-

щої освіти в Україні. *Маркетинг в Україні*. 2016. № 6. **С**. 48-52. 3. *Jim Woodhill*. Capacities for Intuitional Innovation:

Complexity Perspective. *IDS Bulletin*. May 2010. V.41, N 3. P. 47-59.

4. Гадзало Я. М. Про реформування аграрної науки на інноваційній основі. *Економіка АПК*. 2015. № 12. С. 5-12.

5. Державна стратегія регіонального розвитку України на період до 2020 року : Постанова Кабінету Міністрів України від 06.08.2014 р. № 385. База даних «Законодавство України» / ВР України. URL : http://zakon3.rada.gov.ua/laws/ show/385-2014-%D0%BF.

6. Дзвінчук Д., Петренко В. Україна на зламі: прогнози майбутнього вищої освіти й суспільства. Вища школа. 2017. № 3. С. 12-21.

7. Druker P. F. Post-Capitalist Society. New-York : Harper Business, 1993. 232 p.

partnership between higher educational establishments, scientific research establishments, enterprises and organizations with the aim of harmonization of productive, scientific and educational spheres in the process of skilled personnel's` training. We consider the most successful organizational form is the Educational-scientific-productive Consortium of agrarian higher educational agrarian establishments, of scientific research establishments and of productive enterprises in Ukraine.

3. The results of monitoring the regional labor market and employers' requests proved the necessity of gradual adaptation of state orders in higher educational establishments according to the requirements of labor market in Mykolayiv region and providing the enterprises of agrarian industrial complex in Mykolayiv region with skilled specialists, achievement of stable dynamics and hiring them on agricultural enterprises. While taking this fact into consideration, the University has formulated the propositions for forming human capital as strategic resource of the economical growth in agrarian sector of economy in Mykolayiv region in the context of general suggestions to the Program of socioeconomic development of Mykolayiv region in 2018-2020.

4. We consider that dual form education should be determined at the legislative level. It is efficient to define the status of tutor with providing the salary and suitable incentives for businesspersons, who make a significant contribution to the development of dual studies.

References

1. Blahinina, S. (2017). Z dosvidu Nimechchyny: zabezpechennia yakosti osvity v mynulomu i v nash chas [From experience of Germany: providing quality of education in the past and present time]. *Vyshcha shkola, 9, pp. 87-99* [In Ukrainian].

2. Vprovadzhennia elementiv dualnoi osvity v systemu vyshchoi osvity v Ukraini [Introduction of elements of dual education in the higher education system in Ukraine]. (2016). *Marketynh v Ukraini, 6, pp. 48-52* [In Ukrainian].

3. Woodhill, J. (2010). Capacities for intuitional innovation: complexity perspective. *IDS Bulletin, 41, No 3, pp. 47-59* [In English].

4. Hadzalo, Ya.M. (2015). Pro reformuvannia ahrarnoi nauky na innovatsiinii osnovi [On the reformation of agrarian science on innovative basis]. *Ekonomika APK*, *12*, *pp. 5-12* [In Ukrainian].

5. Derzhavna stratehiia rehionalnoho rozvytku Ukrainy na period do 2020 roku : postanova Kabinetu Ministriv Ukrainy vid 06.08.2014 r. # 385 [State strategy of regional development of Ukraine up to 2020: Resolution of the Cabinet of Ministers of Ukraine form 6.08.2014, No. 385]. *Baza danykh "Zakonodavstvo Ukrainy". VR Ukrainy.* Retrieved from: http://zakon3.rada.gov.ua/ laws/show/385-2014-%D0%BF [In Ukrainian]. 8. Дуальна освіта для сільського господарства - німецький досвід та рекомендації для України. URL: http://www.agroosvita.com/.

9. *Іщенко Т. Д.* Фахове навчання в системі безперервної аграрної освіти : навч. посіб. Київ : Аграрна освіта, 2000. 242 с.

10. Концепція Державної цільової програми розвитку аграрного сектору економіки на період до 2020 року : Розпорядження Кабінету Міністрів України від 30.12.2015 р. № 1437-р. URL : http://zakon0.rada.gov.ua/laws/show/1437.

11. Концепція розвитку Миколаївського національного аграрного університету на період 2016-2022 рр. Миколаїв : МНАУ, 2016. 44 с.

12. Лилик С. Система дуальної освіти: чи можливий німецький досвід для України? *Маркетинг в Україні*. 2013. № 6. С. 44-50. URL : http://uam.in.ua/rus/projects/marketingin-ua/arhive.php.

13. Міжнародний форум «Принципи дуальної освіти: можливості впровадження в систему освіти в Україні». *Маркетинг в Україні*. 2015. № 3. С. 54-59. URL : http: // uam.in.ua/rus/projects/marketing-in-ua/arhive.php.

14. Мілл У. Дуальне навчання: досвід Німеччини Маркетинг в Україні. 2016. № 6. С. 53-62.

15. *Ніколаєнко С.* Аграрна освіта і наука в Україні в умовах євроінтеграції: проблеми та виклики. *Вища школа*. 2015. № 11-12. С.19-28.

16. Офіційний сайт Міністерства молоді та спорту України. URL : http://dsmsu.gov.ua/index/ua/material/30229.

17. Постоян Т. Г. Дуальна система навчання в умовах галузевої кластеризації. Педагогічні науки: теорія, історія, інноваційні технології. 2015. № 2. С. 374-382.

18. Проект Концепції підготовки фахівців за дуальною формою здобуття освіти. URL : https://mon.gov.ua.

19. Резолюція конференції «Дуальна освіта як відповідь на виклики, що стоять перед сучасною системою української освіти», 18-19 вересня 2014 р. *Маркетинг в Україні*. 2014. № 5. С. 67- 69. URL : http://uam.in.ua.

20. Сіренко Н. М., Мельник О. І. Розвиток інноваційного підприємництва в аграрному секторі економіки України : [монографія]. Миколаїв, 2016. 243 с.

21. Стратегія розвитку аграрного сектору економіки на період до 2020 року : Розпорядження Кабінету Міністрів України від 17 жовтня 2013 р. № 806-р.

22. Щербак Л. Досвід управління системою професійнотехнічної освіти у Федеративній республіці Німеччині та його ефективність. URL : http:// www.inwent -vet.org.ua/pdf/ukr/.

23. Хоменко М. П., Ткачук О. М. Стан і прогностичні тенденції розвитку аграрної освіти в умовах модернізації вищої освіти та сучасних вимог ринку праці. Проблеми освіти : наук. зб. Київ : Інститут інноваційних технологій й змісту освіти МОН України, 2007. Вип. 53. 132 с.

24. Шебанін В. С. Інноваційно орієнтований університет: теорія і практика створення. Економіст. 2012. № 2. С. 11-13.

25. Шебанін В. С. Інтеграція аграрної освіти, науки і виробництва як основа підготовки сучасних кадрів для АПК. Економіка АПК. 2016. № 11. С. 5-14.

26. Шебанін В. С. Наукове забезпечення інноваційного розвитку АПК як пріоритетний напрям діяльності аграрного університету. Економіка АПК. 2014. № 7. С. 19-25.

27. Шебанін В.С. Освіта та наука як рушійні фактори інноваційного розвитку аграрної сфери України. *Економіка* АПК. 2010. № 3. С. 94-98.

6. Dzvinchuk, D., & Petrenko, V. (2017). Ukraina na zlami: prohnozy maibutnoho vyshchoi osvity y suspilstva [Ukraine at the break: projections for the future of higher education and society]. *Vyshcha shkola, 3, pp. 12-21* [In Ukrainian].

7. Druker, P.F. (1993). *Post-Capitalist Society*. New-York: Harper Business [In English].

8. Dualna osvita dlia silskoho hospodarstva - nimetskyi dosvid ta rekomendatsii dlia Ukrainy [Dual education for agriculture - German experience and recommendations for Ukraine]. *NMTs "Ahroosvita"*. Retrieved from: http://www.agroosvita.com [In Ukrainian].

9. Ishchenko, T.D. (2000). Fakhove navchannia v systemi bezperervnoi ahrarnoi osvity : navchalnyi posibnyk [Professional training in the system of continuous agrarian education: tutorial]. Kyiv: Ahrarna osvita [In Ukrainian].

10. Kontseptsiia Derzhavnoi tsilovoi prohramy rozvytku ahrarnoho sektoru ekonomiky na period do 2020 roku : rozporiadzhennia Kabinetu Ministriv Ukrainy vid 30.12.2015 r. # 1437-r. [Concept of the State target program for a development of the agrarian sector of economy up to 2020: Order of the Cabinet of Ministers of Ukraine form 30.12.2015, No. 1437-r.]. Baza danykh "Zakonodavstvo Ukrainy". VR Ukrainy. Retrieved from: http://zakon0.rada.gov.ua/laws/show/1437 [In Ukrainian].

11. Kontseptsiia rozvytku Mykolaivskoho natsionalnoho ahrarnoho universytetu na period 2016-2022 rr. [The concept of development of Mykolaiv National Agrarian University for the period 2016-2022]. (2016). Mykolaiv: MNAU [In Ukrainian].

12. Lylyk, S. (2013). Systema dualnoi osvity: chy mozhlyvyi nimetskyi dosvid dlia Ukrainy? [System of dual education: Is German experience possible for Ukraine?]. *Marketynh v Ukraini, 6, pp. 44-50.* Retrieved from: http//uam.in.ua/rus/projects/marketing-in-ua/arhive.php [In Ukrainian].

13. Mizhnarodnyi forum «Pryntsypy dualnoi osvity: mozhlyvosti vprovadzhennia v systemu osvity v Ukraini [International forum "Principles of dual education: the possibilities of introduction into the education system in Ukraine"]. (2015). *Marketynh v Ukraini*, *3*, *pp.* 54-59. Retrieved from: http:// uam.in.ua/rus/projects/marketing-inua/arhive.php [In Ukrainian].

14. Mill, U. (2016). Dualne navchannia: dosvid Nimechchyny [Dual education: German experience]. *Marketynh* v *Ukraini, 6, pp. 53-62* [In Ukrainian].

15. Nikolaienko, S. (2015). Ahrarna osvita i nauka v Ukraini v umovakh yevrointehratsii: problemy ta vyklyky [Agrarian education and science in Ukraine in terms of eurointegration: problems and challenges]. *Vyshcha shkola, 11-12, pp. 19-28* [In Ukrainian].

16. Ukrainskyi pakt zarady molodi - 2020 [Ukrainian Pact for Youth - 2020]. *Official website of the Ministry of Youth and Sport of Ukraine*. Retrieved from: http://dsmsu.gov.ua/index/ ua/material/30229 [In Ukrainian].

17. Postoian, T.H. (2015). Dualna systema navchannia v umovakh haluzevoi klasteryzatsii [Dual system of education in terms of branch clusteringy]. *Pedahohichni nauky: teoriia, istoriia, innovatsiini tekhnolohii, 2, pp. 374-382* [In Ukrainian].

18. Proekt Kontseptsii pidhotovky fakhivtsiv za dualnoiu formoiu zdobuttia osvity [Draft Concept of training specialists for the dual form of education]. *Ministry of Science and Education of Ukraine*. Retrieved from: https://mon.gov.ua [In Ukrainian].

19. Rezoliutsiia konferentsii "Dualna osvita yak vidpovid na vyklyky, shcho stoiat pered suchasnoiu systemoiu ukrainskoi osvity" [Resolution of the conference "Dual education as a response to the challenges faced by the modern system of Ukrainian education"]. (2014). *Marketynh v Ukraini*, *5*, *pp.* 67-69. Retrieved from: http://uam.in.ua [In Ukrainian].

20. Sirenko, N.M., & Melnyk, O.I. (2016). Rozvytok innovatsiinoho pidpryiemnytstva v ahrarnomu sektori ekonomiky Ukrainy : monohrafiia [Development of innovative entrepreneurship in the agrarian sector of the Ukrainian economy: monograph]. Mykolaiv [In Ukrainian].

21. Stratehiia rozvytku ahrarnoho sektora ekonomiky na period do 2020 roku : Rozporiadzhennia Kabinetu Ministriv Ukrainy vid 17 zhovtnia 2013 r. # 806-r. [Strategy for a development of the agrarian sector of economy up to 2020: Order of the Cabinet of Ministers of Ukraine from 17.10.2013, No. 806-r.]. *Baza danykh "Zakonodavstvo Ukrainy". VR Ukrainy.* Retrieved from: http://zakon.rada.gov.ua [In Ukrainian].

22. Shcherbak, L. (n.d.). Dosvid upravlinnia systemoiu profesiino-tekhnichnoi osvity u Federatyvnii respublitsi Nimechchyni ta yoho efektyvnist [Experience in managing the system of vocational and technical education in the Federal Republic of Germany and its effectiveness]. Retrieved from: http://www.inwent-vet.org.ua/pdf/ukr [In Ukrainian].

23. Khomenko, M.P., & Tkachuk, O.M. (2007). Stan i prohnostychni tendentsii rozvytku ahrarnoi osvity v umovakh modernizatsii vyshchoi osvity ta suchasnykh vymoh rynku pratsi [Status and prospective tendencies of agrarian education development in conditions of modernization of higher education and modern labor market requirements]. *Problemy osvity : nauk. zb. Kyiv: Instytut innovatsiinykh tekhnolohii y zmistu osvity MON Ukrainy, 53, p. 132* [In Ukrainian].

24. Shebanin, V.S. (2012). Innovatsiino oriientovanyi universytet: teoriia i praktyka stvorennia [Innovatively oriented university: the theory and practice of creation]. *Ekonomist*, *2*, *pp. 11-13* [In Ukrainian].

25. Shebanin, V.S. (2016). Intehratsiia ahrarnoi osvity, nauky i vyrobnytstva yak osnova pidhotovky suchasnykh kadriv dlia APK [Integration of agrarian education, science and production as basis of modern training for AIC]. *Ekonomika APK*, *11*, *pp. 5-14* [In Ukrainian].

26. Shebanin, V.S. (2014). Naukove zabezpechennia innovatsiinoho rozvytku APK yak priorytetnyi napriam diialnosti ahrarnoho universytetu [Scientific support of innovative development of AIC as a priority direction of agrarian university activity]. *Ekonomika APK, 7, pp. 19-25* [In Ukrainian].

27. Shebanin, V.S. (2010). Osvita ta nauka yak rushiini faktory innovatsiinoho rozvytku ahrarnoi sfery Ukrainy [Education and science as key factors of innovative development of the agrarian sector of Ukraine]. *Ekonomika APK*, *3*, *pp. 94-98* [In Ukrainian].

Шебанін В.С. Дуальна форма освітньої підготовки висококваліфікованих фахівців для аграрної сфери України

Mema cmammi - розкрити сутність і значення дуальної форми здобуття освіти у професійній підготовці висококваліфікованих фахівців з урахуванням досвіду його впровадження у Миколаївському національному аграрному університеті.

Методика дослідження. Методи: гносеологічний, системний підхід, порівняльного аналізу, індуктивний та дедуктивний підхід.

Результати дослідження. Розкрито сутність і значення дуальної форми здобуття освіти у професійній підготовці висококваліфікованих фахівців. Висвітлено особливості запровадження дуального навчання у Миколаївському національному аграрному університеті. Показано, що впровадження дуальної форми здобуття освіти у є запорукою підвищення якості підготовки фахівців з урахуванням вимог роботодавців. Обґрунтовано, що дуальна форма здобуття освіти передбачає використання найновіших наукових досягнень, інноваційних розробок і технологій не лише університетської науки і виробництва, а й досягнень академічної науки. Найбільш вдалою організаційною формою співпраці визначено Навчально-наукововиробничий консорціум аграрних закладів вищої освіти, науково-дослідних установ та виробничих підприємств України. Доведено, що впровадження елементів дуального навчання реально підвищує рівень практичної підготовки здобувачів вищої освіти, формує й розвиває у них фахові компетенції, сприяє процесу адаптації до професійної діяльності, забезпечує рівновагу між попитом та пропозицією фахівців на ринку праці.

Елементи наукової новизни. За результатами проведеного моніторингу регіонального ринку праці та запитів роботодавців визначено необхідність поступового приведення державного замовлення у закладах вищої освіти до потреб ринку праці у Миколаївській області й забезпечення підприємств аграрної сфери кваліфікованими фахівцями, досягнення стійкої динаміки і закріплення. Визначено коло основних завдань, вирішення яких дасть можливість забезпечити аграрний сектор економіки Миколаївської області компетентними кадрами, здатними організувати високопродуктивне, ефективне й ресурсоощадне виробництво в умовах інноваційного розвитку.

Практична значущість. Обґрунтовано напрями розвитку кадрового потенціалу аграрного сектору економіки Миколаївської області. Доведено, що при розробленні навчальних планів і освітніх програм необхідно враховувати виробничоорієнтовану підготовку фахівців за програмою дуальної форми здобуття освіти. Розроблено заходи з формування людського капіталу як стратегічного ресурсу економічного зростання аграрного сектору економіки Миколаївської області в контексті загальних пропозицій до Програми соціально-економічного розвитку Миколаївської області на 2018-2020 рр. Визначено, що впровадження дуального навчання у підготовці фахівців є засобом професійної соціалізації сільської молоді, надаючи їй найкращі можливості для отримання престижної на ринку праці кваліфікації. Рис.: 2. Бібліогр.: 27.

Ключові слова: дуальна форма здобуття освіти, агропромисловий комплекс, університет, інтеграція, соціалізація, професійна діяльність, консорціум, кадровий потенціал.

Шебанін В'ячеслав Сергійович - доктор технічних наук, професор, академік НААН, ректор, Миколаївський національний аграрний університет (м. Миколаїв, вул. Георгія Гонгадзе, 9) E-mail: rector@mnau.edu.ua Шебанин В.С. Дуальная форма образовательной подготовки высококвалифицированных специалистов для аграрной сферы Украины

Цель статьи - раскрыть сущность и значение дуальной формы образования в профессиональной подготовке высококвалифицированных специалистов с учетом опыта ее внедрения в Николаевском национальном аграрном университете.

Методика исследования. Методы: гносеологический, системный подход, сравнительный анализ, индуктивный и дедуктивный подход.

Результаты исследования. Раскрыты сущность и значение дуального обучения в профессиональной подготовке высококвалифицированных специалистов. Освещены особенности внедрения дуального обучения в Николаевском национальном аграрном университете. Показано, что внедрение дуального обучения является залогом повышения качества подготовки специалистов с учетом требований работодателей. Обосновано, что дуальная форма образования предусматривает использование новейших научных достижений, инновационных разработок и технологий не только университетской науки и производства, но и достижений академической науки. Наиболее удачной организационной формой сотрудничества является Учебно-научно-производственный консорциум аграрных высших учебных заведений, научно-исследовательских учреждений и производственных предприятий Украины. Доказано, что внедрение элементов дуального обучения реально повышает уровень практической подготовки студентов, формирует и развивает у них профессиональные компетенции, способствует процессу адаптации к профессиональной деятельности, обеспечивает равновесие между спросом и предложением специалистов на рынке труда.

Элементы научной новизны. По результатам проведенного мониторинга регионального рынка труда и запросов работодателей определена необходимость постепенного приведения государственного заказа в учреждениях высшего образования в соответствие с потребностями рынка труда в Николаевской области и обеспечения предприятий аграрной сферы квалифицированными специалистами, достижения устойчивой динамики и закреплению. Определен круг основных задач, решение которых позволит обеспечить аграрный сектор экономики Николаевской области компетентными кадрами, способными организовать высокопроизводительное, эффективное и ресурсосберегающее производство в условиях инновационного развития.

Практическая значимость. Обоснованы направления развития кадрового потенциала аграрного сектора экономики Николаевской области. Доказано, что при разработке учебных планов и образовательных программ необходимо учитывать производственно-ориентированную подготовку специалистов по программе дуальной формы получения образования. Разработаны мероприятия по формированию человеческого капитала как стратегического ресурса экономического роста аграрного сектора экономики Николаевской области в контексте общих предложений в Программу социальноэкономического развития Николаевской области на 2018-2020 гг. Установлено, что внедрение дуального обучения в подготовке специалистов является средством профессиональной социализации сельской молодежи, предоставляя ей лучшие возможности для получения престижной на рынке труда квалификации. Илл.: 2. Библиогр.: 27.

Ключевые слова: дуальная форма образования, агропромышленный комплекс, университет, интеграция, социализация, профессиональная деятельность, консорциум, кадровый потенциал.

Шебанин Вячеслав Сергеевич - доктор технических наук, профессор, академик НААН, ректор, Николаевский национальный аграрный университет (г. Николаев, ул. Георгия Гонгадзе, 9) *E-mail: rector@mnau.edu.ua*

> The article has been received 20.02.2018 Revision: 26.02.2018

Бібліографічний опис для цитування :

Shebanin V. S. Dual form of education in the training of highly qualified specialists for the agrarian sphere of Ukraine. *Економіка АПК*. 2018. \mathbb{N} 3. C. 13 – 23.

* * *