UDC 337.12
DOI: https://doi.org/10.17721/2415-369.2022.15.07

Olga Plakhotnik, Doctor of Sci. (Pedagogy), Prof.
ORCID iD: 0000-0002-7732-5554
Taras Shevchenko National University of Kyiv, Kyiv, Ukrain
Inna Strazhnikova, Doctor of Sci. (Pedagogy), Prof.
ORCID iD: 0000-0001-5921-6197
Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, Ukraine
Alla Kondratiuk, PhD (Pedagogy), Ass. Prof.
ORCID iD: 0000-0003-1303-0017
National Pirogov Memorial Medical, University, Vinnytsya, Ukraine

PECULIARITIES OF THE DUAL EDUCATION IN GERMANY AS AN IMPORTANT ELEMENT OF PROFESSIONAL TRAINING

The need to reform the higher education system both in European countries and in Ukraine has led to the need to study the leading experience of educational practices of higher education institutions. German education is considered to be one of the best examples of high-quality modern education the practice of which is followed by the whole world.

The development of german education is characterized by the transition to a dual system of education which has been successfully used in the country for more than twenty years. And, accordingly, as a result, Germany has shown high results and professional achievements of students as well as one of the lowest levels of youth unemployment. Moreover, the focus on german education is growing due to the successful combination of learning, practice and support for young people in personal and family development. Therefore, the study of Germany's best practices in the field of dual education is an important element in improving the system of Ukrainian and European education.

Comparing the systems of dual and traditional learning, we tend to claim that the benefits of dual learning are obvious: 1) learning is as close as it is possible to the demands of production; 2) high employment rate; 3) increasing the diversity of educational programs; 4) more diverse professional development of the student; 5) stimulating business in investing in vocational education; 6) the implementation of scientific research is facilitated by the possibility of using modern production equipment directly in production itself; 7) there is an opportunity to influence the personality of the specialist as well as the formation of the necessary qualities of the employee in the model of the dual system of training; 8) as a technology, the dual system of training increases the motivation and need to obtain the knowledge necessary for professional activities due to the fact that the quality of acquired knowledge will allow to perform high-quality duties in the workplace.

Keywords: german higher education, reform of higher education systems, dual education, professional standards, vocational training programs, traditional education.

Introduction. The need to reform the higher education system both in European countries and in Ukraine has led to the need to study the leading experience of educational practices of higher education institutions. German education is considered to be one of the best examples of high-quality modern education the practice of which is followed by the whole world.

The development of german education is characterized by the transition to a dual system of education which has been successfully used in the country for more than twenty years. And, accordingly, as a result, Germany has shown high results and professional achievements of students as well as one of the lowest levels of youth unemployment. Moreover, the focus on german education is growing due to the successful combination of learning, practice and support for young people in personal and family development. Therefore, the study of Germany's best practices in the field of dual education is an important element in improving the system of Ukrainian and European education.

Germany and Austria are supposed to be the homelands of dual education. It was there that the practice of combining academic education with practical training in the workplace emerged. Special emphasis should be placed on Germany's success in the field of dual education: by developing and improving the dual model the country has achieved universally recognized success in training the staff.

An important condition in the organization of dual education is a well-developed institution of mentoring. Dual training includes the involvement of enterprises and large organizations in the training of highly qualified young people [Henning Potzold, 2016].

The term "dualistic", "duality" (from Latin "dualis") means "dual". It is widely used in various fields of knowledge. In pedagogy the terms "dual" and "dual system" were first used in Germany in the mid-1960s. to denote a new form of vocational education, which later gained recognition and worldwide popularity. Today, the dual system of education makes German pedagogy different. Turning to the history of the formation of a dual system of education, it should be noted that (according to German researcher K. Strathmann), there is no "date of birth" of this system because it has its roots in the guild organization of labor in Germany.

Research methods. In order to study the role of dual education in the process of reforming higher education in Ukraine, a set of methods was used: analysis, comparison, classification, systematization and generalization to study scientific literature, government documents, curricula and training programs for future professionals. It made it possible to analyze and summarize the scientific directions and points of view of various authors to the problem and to identify and theoretically substantiate various aspects of dual education in Germany, its impact on the formation of professional competencies and personal qualities of future professionals.

The state of research of the problem.

Modern higher education in both Germany and Ukraine has significant achievements in the field of research in dual education in Germany. German researchers such as A. Lipsmeier (1998), A. Mohr (1998), I. Myunch (1996), G. Schubring (1988) and many other researchers have devoted their work to the analysis of current trends in vocational education in Germany, problems and prospects. development of higher and, in particular, the problems of dual education. The problems of comparing traditional and dual education were discussed at forums of different levels.

Scientists from other countries did not stay away from the problem. In particular, a number of scientific papers on the problem of dual education have been prepared and published in the Ukrainian educational field. Thus, N. Abashkina

devoted her monograph to the general principles of vocational education in Germany (1998), M. Basyuk (2014) and I. Boychevska (2017) studied the influence of preconditions on the formation of the modern dual system of higher education in Germany, M. Golubeva O. and I. Pyankovska analyzed the stages of development of higher education in the Federal Republic of Germany in 1990–2010, V. Vemyan focused his research on the study of the dual form of vocational education as a condition for effective solutions to the problems of modernization of education.

Historically only young people learned various trades , for a long time in Germany, Europe and Asia. The master instilled the necessary knowledge and skills of a profession, showed techniques, and students, in theit turn, sought to achieve the level of knowledge and skills of their master. This type of professional training has existed for several centuries [1, p. 22]. The dual form of vocational education (as the main method of training and educating young workers) came into force with the adoption of the Vocational Education Act in 1969 which still remains in force. German scientist J. Munch divides this system of education into two different learning and production environments that work together in the name of a common goal – the training of students. He proposed the following scheme of the structure of the dual system of vocational training in Germany:

1. Training and production environment of the enterprise includes:

1) a workplace for those who study with partial pay;

2) training workshop or laboratory;

3) in-house training.

2. The training and production environment of the vocational school provides:

1) training class;

2) workshop or laboratory [Bildung, 2022, p.117].

I. Boychevska notes that the famous German scientist A. Shelten drew attention to this issue highlighting such features of the dual system as the search for pedagogical interaction between enterprise and educational institution. Education at the enterprise is mainly professional and practical in nature. Thus, in the educational institution it has a professional and theoretical orientation and involves the continuation of general education [Boychevska I., 2017].

V. Vemyan notes that the formation of students' adaptation to the profession involves social partnership of educational institutions and enterprises.

She notes the following types of social partnership:

a) deepening the relationship between training and production processes;

b) training in the specialty in terms of social partnership (thectime for humanities training of students is freed up and the level of culture is raised);

c) the rapprochement of educational institutions with enterprises;

d) continuity of theoretical and practical aspects of professional training [Vemyan V., 2015, p.29-34].

It should be emphasized that strengthening the ties with enterprises opens up additional opportunities for educational institutions in the following areas: 1) organization of student practice; 2) access to information on the labor market; 3) taking into account the requirements of employers and expanding employment opportunities for graduates; 4) simplification of the procedure for adjusting training programs that meet the requirements of employers.

A combination of practical experience and theoretical learning is a feature of dual learning. Hence the interpretation of the term "dual learning": dual learning is a combination of learning the theoretical foundations in the school and practice in the relevant organization.

Considering dual learning as a pedagogical problem, it is necessary to pay attention to: a) the variety of factors influencing the nature of interaction with partner educational institutions; b) the specifics of the training profile, which determines the structure of the educational process; c) economic, geographical and social conditions of the educational organization; d) traditions and innovative educational technologies. Therefore, dual learning can be considered as a multifaceted phenomenon that affects the development of vocational education, including pedagogical training [Dualna osvita, 2018].

The development and promotion of a competency-based approach in higher pedagogical school is considered to be the basis of dual training in the educational process as well as in retraining of teachers. Since competencies can only be developed in activities, it becomes obvious that the formation of professional competencies requires a professional environment. Experience of professional pedagogical activity can be gained only in real working conditions. Therefore, on-the-job training is a necessary condition for the formation of professional competencies [Dualna osvita, 2018].

Recognition of the interdependence of the development of two systems: school – an institution of higher education (university) – is a key point in the consideration of dual education. In the innovative pedagogical activity the combined efforts of the pedagogical university and the school are the driving force behind the organizing principle – dual learning. The development of interaction requires fixing the forms and conditions of building relations between partners, a clear delineation of powers and areas of responsibility enshrined in regulations. Currently, relations are established by bilateral agreements on pedagogical practice of university students in educational institutions (schools, gymnasiums, lyceums).

To achieve the task of improving the quality of vocational education, the most promising is the "dual training" of future professionals in which the theoretical part of the training takes place on the basis of the educational organization, and practical – at the workplace. In the dual system of education, the role of the employer is strengthened and qualitatively changed. Ideally, everything should look like this: companies make orders to educational institutions for a specific number of specialists, while participating in the preparation of educational and methodological documentation, students have an internship at the company without leaving the institution.

The most important component of this system is the availability of trained personnel to those enterprises that are in the role of mentors. M. Basyuk sees the fact that in this case companies are even more interested in quality training than educational institutions an important feature of the dual approach to learning. Therefore, manufacturers fully share the responsibility for the organization of the educational process, monitor the continuity in the theoretical and practical training of students who are already perceived as their future employees [Dualna osvita, 2018].

Scientific discussion and conclusions. Dual form of learning differs favorably from the traditional level of focus on specific practical tasks in real conditions. Educational and methodical materials, developed within the dual form, have an important focus on the sttudents practical activities [Vemyan V., 2015].

The provision of a high percentage of graduates employment is the advantage of dual education as they fully meet the professional requirements and get work experience that is greatly valued by the employers. Training is as close as possible to the demands of production. Adaptation to a new place of work, to the range of responsibilities and to the team, which frightens people who have even been in the profession, is painless for the student. This can be explained by the fact that the student from the first day at the company is assigned a mentor who will help with the advice and share experiences. The amount of responsibilities of the student increases gradually due to the development of individual operations. If we consider the benefits for participants in dual education, we can state that they are structural.

Enterprises receive: qualified specialists who fully meet their requirements; training costs are significantly reduced; solving the personnel problem.

For vocational education organizations: an important problem of practice bases is solved; guaranteed employment of graduates; improving the quality of education and, consequently, the rating of the educational institution; possibility of internship of pedagogical staff; the possibility of implementing programs in the framework of social partnership; equipped workplaces with modern equipment.

For the state and society: reduction of training costs; solving the problem of staff shortage; saving the state budget; socialization; targeted use of funds; acceleration of innovation processes.

The dual system meets the interests of all parties involved – businesses, educational organizations, the state and, of course, students. For students, dual education is not only a chance to get a qualified position after graduating from the university, but also to gain independence and adapt more quickly to adult life.

The dual system provides graduates with the prospects and opportunities to manage their own careers. Accordingly, dual education is an important step on the path to a successful career, no secondary vocational education is able to provide such knowledge of production from the inside. However, the existing problems in the full implementation of the dual form of education can be solved only by resolving legal aspects, methodological support (development of special educational programs and curricula), but most importantly – the availability of resources in the enterprise (financial, logistical, labor) .

Dual learning also acts as a mechanism for solving social problems, which, according to researchers, "includes" a social elevator, promotes a young specialist in the career ladder. In addition, the successful socialization of students is due to the expansion of the comfort zone of students (self-confidence, maturity, confidence in the future).

As part of dual education, the student gets the opportunity to work and receive payment for their work, provides early adaptation in the teaching staff. But the main thing is that a young person gains confidence in the future, gaining employment opportunities and work experience.

There are several benefits of dual learning. The first is the immersion of the student in the professional world, which is still being studied. The synergy of theoretical study at the university and gaining professional experience is the issue which is often the most interesting for students in the curriculum. Long before graduation, the student has the opportunity to get acquainted with real professional activities.

Unlike pedagogical practice in an educational institution (school, college, lyceum), dual education programs involve long-term employment contracts between the student and the employer, which allow the student to work and study at the same time and really develop knowledge gained at university. The connection between theoretical training and performance of professional functions is established faster and stronger. In addition, dual education allows the student to determine their professional trajectory in accordance with the acquired skills, desires, expectations and awareness of their professional purpose.

Secondly, dual learning also creates conditions that cannot be simulated in a university classroom: understanding the real needs of the school, relationships with other staff, teacher-student relationships, hierarchical relationships or full participation in various school projects. In addition, professional integration allows the student to start creating his/her own "professional network" very early, by which we mean a list of people with whom the student has a professional relationship and to whom he can turn at the end of his studies when looking for work [Holubyeva M., Pyankovska I., 2010]. When a learner does enter the job market, this network can be crucial.

Thirdly, it is a monthly remuneration, which is set according to various criteria, the nature of the employment contract, the amount of work performed, which is often calculated in hours or rates, the availability and amount of incentive payments. Full-time position allows a student to enjoy many benefits (such as paid leave), but he or she can always take advantage of his or her student card and the many benefits it offers until he or she completely loses his or her student status. Dual learning as a model of continuing education is considered from the standpoint of the common idea of "lifelong learning". Constant updating of production technologies requires employees not only to increase experience, but also its restructuring and supplementing with new knowledge [Arnold Rolf und Potzold Henning, 1998].

The model of dual education has a high level of independence and responsibility of the student for the result of their activities. On-the-job training, extracurricular independent student work, individual educational trajectories allow to create conditions for the formation of general competencies that constantly develop the ability to self-education and self-development. In addition, the student has the opportunity to expand the scope of personal experience, gaining additional competencies in the workplace. It should be noted that the expansion of opportunities to acquire additional competencies in the framework of dual education forces teachers and mentors to master new pedagogical technologies, which is also a logical continuation of continuing education.

Thus, it can be seen that the dual system meets the interests and requirements of three stakeholders at once: enterprises (institutions), students and the state. Businesses need "ready" specialists who, when they come to work, immediately start carrying out professional activities without long-term adaptation and "training" in the workplace.

Graduates of higher education institutions are interested in the issue of successful employment according to their specialty. The state thus effectively solves the problem of training qualified personnel for the whole economy. The use of elements of the dual system of education in the educational process contributes to the formation of professionals with a higher and more modern level of education, as this type of training allows students to open up, discover their knowledge, develop creative thinking, learn to plan and achieve expected results [Basyuk M., 2014].

In the context of the researched problem, it is worth paying attention to the fact that the German dual system of

professional orientation, self-determination and training is characterized by collegial decision-making. At all stages of the educational process, among the individual functional structures (federal and state authorities, enterprises, center of competence, vocational school and chambers of commerce), there is interaction, scientific and methodological support which is accompanied by the Federal Institute for Vocational Education in Germany. This approach provides a quality outcome of the development of dual education. Industrial training takes place both in vocational and technical institutions, in the center of competences as well as in enterprises on the basis of problem-analytical method of presenting educational material [Henning Potzold, 2016].

The equal responsibility of educational institutions and enterprises for the quality of training is the basic principle of the dual system of education.

Dual education (in a broad sense) is an infrastructural regional model that ensures the interaction of systems: forecasting staff needs; professional self-determination; vocational education; assessment of professional qualifications, training and retraining of teachers, including those in the workplace. The relationship between the parties is regulated by a flexible consensus and collegial management system. Each system affects the development of the other and can not work effectively without each other. The integrity and at the same time the distribution of the functions of the participants is ensured by the effectiveness of the dual model of learning (education).

The analysis of the problem gave us grounds to distinguish the advantages of the dual system of education in comparison with the traditional one: it eliminates the gap between theory and practice; the influence on the personality of the specialist, the creation of a new psychology of the future employee; acquaintance of students with the corporate culture of the enterprise and its features; minimizing the costs of social and labor adaptation of the graduate in the new team at work; creating high motivation to acquire knowledge and skills in work since the quality of knowledge is directly connected with the performance of official duties in the workplace.

Purposes:

- the development of technical and vocational education by creating a highly effective competitive system of training and retraining of workers and technicians.
- the introduction of new learning technologies in the educational process of vocational education organizations.
- further development of the system of continuous professional education.
- stimulating the development, processing and improvement of professional standards of work and technical specialties.

Tasks:

- bringing the volume, profiling and territorial location of training organizations for staff and technical personnel preparation in line with the needs of the labor market, the dynamics and prospects of development of the economy and social sphere and taking into account the innovative direction of economic development strategy.
- the development of a multidisciplinary and multifunctional network of educational institutions for vocational training and retraining of workers and technical staff that meet the needs of the population and the labor market.
- the change and qualitative update of the content and structure of educational programs for the system of training and retraining of workers and technical staff, ensuring their high professionalism and mobility.
- the creation of favorable conditions for personnel, scientific-methodical and material-technical equipment of educational organizations of professional training and retraining.

The advantages of the dual system of training in comparison with the traditional one are visible: the interest of the heads of the respective institutions in the practical training of their employee; consideration by the educational institution of the requirements set for future specialists in the course of training; use of modern equipment in the educational process in the conditions of real production sites; involvement of highly qualified engineering and technical personnel of the enterprise in the educational process as specialists of professional training; students can receive a monetary reward for their work at the company during their studies.

The dual system, in contrast to the traditional one, provides for the alternation of theory and practice during the entire training period, which leads to the effectiveness and efficiency of the use of acquired knowledge and skills. The system of dual education also differs from vocational school education in that most of the school week is devoted to practice at the enterprise, and less (1-2 days) – in educational institutions (reduction of classes to 30%). The volume of internships has been increased to 60-70% of the curriculum. Providing a scholarship from the company for the entire period of study, delivery from work to home. The themes of term and final qualifying works are focused on the potential needs of employers (while in the traditional system of education the subject of term and final qualifying works does not reflect the specifics of production) [Basyuk M., 2014].

The serious shortcomings of the dual system of education include the fact that the curriculum for in-depth study of disciplines is given an insufficient number of hours due to the intensive organization of practical training. Students do not have vacation time though they are given a certain number of days off.

As a rule, the dual system of education is used in the technical and socio-economic fields, also covering construction, engineering. The dual system has proven itself well in social management, tourism management. In recent decades, the dual education system has become acceptable in the field of information technology due to the constant modernization of training of high-quality professionals.

Conclusions. Germany's experience in organizing a dual education system shows that the development of professional standards and professional training programs requires a new didactic approach to determining the structure of the professional profile. Professional profiles are identical to the concept of "employee job function". Being based on competencies, employee job function provides flexibility of educational programs and employment opportunities as well as reduces the cost of training and retraining of employees in the event of a job change. Financing of vocational training at enterprises is provided by the budget of the federal states, training in educational institutions is provided by the municipal (local) budget.

The progressiveness of German dual education system is seen in the fact that professional standards are combined with educational and qualification standards. Professional standards describe typical competencies for a particular profession and are developed separately. They, in turn, are taken into account in the process of developing educational and qualification standards. Thus, the dual system regulates learning in the enterprise and in educational institutions as a process and as a result of the implementation of quantitative

norms. Norms and requirements are the basis for quality assessment and awarding of professional qualifications based on exam results.

Comparing the systems of dual and traditional learning, we tend to claim that the benefits of dual learning are obvious: 1) learning is as close as it is possible to the demands of production; 2) high employment rate; 3) increasing the diversity of educational programs; 4) more diverse professional development of the student; 5) stimulating business in investing in vocational education; 6) the implementation of scientific research is facilitated by the possibility of using modern production equipment directly in production itself; 7) there is an opportunity to influence the personality of the specialist as well as the formation of the necessary qualities of the employee in the model of the dual system of training; 8) as a technology, the dual system of training increases the motivation and need to obtain the knowledge necessary for professional activities due to the fact that the quality of acquired knowledge will allow to perform high-quality duties in the workplace.

References

Abashkina N. (1998). Pryntsypy rozvytku profesiynoyi osvity v Nimechchyni: monohrafiya. K.: Vyshcha shkola, 207 s.

Arnold, Rolf und Potzold, Henning (1998). Schulpedagogik kompakt. Berlin: Cornelsen, 300 s.

Basyuk M. P. (2014). Vplyv peredumov na formuvannya suchasnoyi dual'noyi systemy vyshchoyi osvity Nimechchyny. Pedahohichni nauky: teoriya, istoriya, innovatsiyni tekhnolohiyi, № 4 (38). s. 92-98.

Boychevska I. (2017). Dual'na systema Nimechchyny. Navchal'no-metodychnyy tsentr profesiyno-tekhnichnoyi osvity u Sums'kiy oblasti: sayt. 04.2017. URL: http://nmcpto.sumy.ua/wpcontent/uploads/2017/04/Dual'na systemaNimechchyny.pdf

Bildung. Wissenschaft. Innovation. Stifterverband (2022).: sayt. URL: https://www.stifterverband.org/ (data zvernennya: 16.01.2022).

Vemyan V.H. (2015). Dual'na forma profesiynoyi osvity yak umova efektyvnoho rishennya zavdan' modernizatsiyi osvity. Psykholohiya: real'nist' i perspektyvy: zb. nauk. pr. / Rivnen. derzh. humanitar. un-t. Rivne, 2015. Vyp. 5. S. 29–34. URL: http://nbuv.gov.ua/UJRN/ prp_2015_5_8 (data zvernennya: 27.03.2019).

Holubyeva M. O., Pyankovska I. V. (2010). Etapy rozvytku vyshchoyi osvity Federatyvnoyi Respubliky Nimechchyna u 1990-2010 rokakh. Zb. nauk prats'. Pedahohichni nauky. 2010. № 55.S. 18–23.

Dualna osvita. (2018). Ministerstvo osvity i nauky Ukrayiny: ofitsiynyy sayt. 2018. URL: https://mon.gov.ua/ua/osvita/profesijno-tehnichnaosvita/dualna-osvita).

Henning Potzold (2016). Berufsschule und Betrieb als Lernorte im dualen System. Technische Universitdt Kaiserslautern, Fachgebiet Sozialwissenschaften, Fachbereich Pedagogik. Sommersemester, 2016. 19 S.

Надійшла до редколегії 23.01.22

Ольга Плахотнік, док. пед.. наук, проф.
ORCID iD: 0000-0002-7732-5554
Київський національний університет імені Тараса Шевченка, Київ, Україна
Інна Стражнікова, док. пед.. наук, проф.
ORCID iD: 0000-0001-5921-6197
Прикарпатський національний університет імені Василя Стефаника, Івано-Франківськ, Україна
Алла Кондратюк, канд. пед. наук, доц.
ORCID iD: 0000-0003-1303-0017
Вінницький національний медичний університет імені М.І.Пирогова, Вінниця, Україна

ОСОБЛИВОСТІ ДУАЛЬНОЇ ОСВІТИ НІМЕЧЧИНИ ЯК ВАЖЛИВОГО ЕЛЕМЕНТУ ПРОФЕСІЙНОЇ ПІДГОТОВКИ ФАХІВЦІВ

Необхідність реформування системи вищої освіти як у Європейських країнах, так і в Україні зумовила потребу у дослідженні провідного досвіду освітніх практик закладів вищої освіти. Німецька освіта вважається однією з кращих взірців високоякісної сучасної освіти, практику якої наслідує весь світ.

Розвиток німецької освіти характеризується переходом до подвійної системи навчання, що успішно застосовується в країні вже більше двадцяти років. І, відповідно, як результат, Німеччина показала високі результати та професійні досягнення студентів, а також один із найнижчих рівнів безробіття молоді. Більше того, увага до німецької освіти зростає через успішне поєднання навчання, практики та підтримки молоді в особистісному та сімейному становленні. Тому вивчення передового досвіду Німеччини у сфері впровадження дуальної освіти є важливим елементом вдосконалення системи української та загальноєвропейської освіти. Досвід Німеччини в організації дуальної системи освіти показує, що для розробки професійних стандартів та навчальних професійних програм потрібен новий дидактичний підхід визначення структури професійного профілю.

Порівнявши системи дуального і традиційного навчання, ми схиляємось до твердження, що переваги дуального навчання очевидні: 1) навчання максимально наближене до запитів виробництва; 2) високий відсоток працевлаштування; 3) збільшення різноманітності освітніх програм; 4) більш різнобічний професійний розвиток студента; 5) стимулювання бізнесу у інвестування професійної освіти; 6) виконанню наукових досліджень сприяє можливість використання сучасного виробничого обладнання безпосередньо на виробництві; 7) у моделі дуальної системи навчання є можливість впливати на особистість спеціаліста, формування необхідних якостей працівника; 8) дуальна система навчання як технологія підвищує мотивацію та потреби для отримання знань, необхідних для професійної діяльності, у зв'язку з тим, що якість набутих знань дозволить якісно виконати службові обов'язки на робочому місці.

Ключові слова: вища освіта Німеччини, реформування систем вищої освіти, дуальна освіта, професійні стандарти, навчальні професійні програми, традиційне навчання.

UDC 37.026.8
DOI: https://doi.org/10.17721/2415-369.2022.15.08

Olga Poliak, PhD (Pedagogy), Ass. Prof.
ORCID iD: 0000-0002-1981-4536;
Tatiana Tsivrkun, student
Taras Shevchenko National University of Kyiv, Kyiv, Ukraine

ACADEMIC INTEGRITY IN UKRAINE AND GERMANY: COMPARATIVE ASPECT

The concept of "academic integrity" in Ukraine and Germany is studied, the basic principles of academic integrity in these countries are compared, the procedure for identifying and establishing the facts of violation of academic integrity is highlighted.

It has been proved that Ukraine can rely on the experience of Germany in the development of academic integrity, as each university must, within its statutory powers, be responsible for the organization of research, its integrity and scientificity.

Keywords: academic integrity, plagiarism, violations, detection mechanisms, ombudsman.

Introduction. Modern information technologies, electronic libraries provide endless opportunities for development, but at the same time can be used not only for educational purposes, but also as a means of falsification, borrowing of certain data. In this regard, much attention in the modern scientific world is paid to the observance of academic integrity in all higher education institutions in different countries. That is why the aim of the article is a comparative aspect of the functioning of academic integrity in Ukraine and Germany, which involves solving the **following purposes:**

1. Find out the definition of "academic integrity" in Ukraine and Germany;
2. Compare the basic principles of academic integrity in the two countries;
3. To clarify the procedure for identifying and establishing the facts of violation of academic integrity;
4. Highlight important aspects of Germany's experience of academic integrity for use in Ukraine.

Analysis of recent research and publications. The concept of "academic integrity", its principles and adherence / non-compliance with the basic principles is the subject of many scientific studies. N. Sorokina, A. Artyukhova, I. Degtyarova published a collective research study "Academic Integrity: Issues of Compliance and Priorities for Youth Dissemination", J. Tytska analyzed the concepts of "academic integrity" and "academic responsibility" in ensuring the quality of education, O. Chumak – the concept of the category of integrity in higher education, Yu. Malogulko and M. Zathei – problems of academic integrity in higher education, I. Todorova from a psychological point of view clarified the factors of tolerance of students to academic dishonesty, O. Semanog compared European and national contexts academic culture of the researcher in terms of implementing the experience of projects, A. Kolesnikov highlighted the problems and social threats in the Ukrainian educational and scientific space for academic integrity and more. Despite the large number of studies, the problem of academic integrity in the scientific space of Ukraine remains relevant, which leads to consideration and possibility of researching these concepts in comparison with the experience of other countries that have successful experience of academic integrity and already formulated principles, principles, ways to test and overcome various threats.

Presentation of main positions. Statistics from a 2016 study on the use of plagiarism in student work in various countries show a high percentage of non-academic integrity in Ukraine, as Ukraine ranked fifth because it has a plagiarism rate of 34.4% [Riven plahiatu v studentskykh robotakh u krainakh Yevropy, 2021]. At the same time, Germany ranked 30th out of 34, as it has a much lower share of plagiarism in student work (9.1%) [Riven plahiatu…, 2021]. Note that this trend in the scientific work of Ukrainian students was observed in other years, as "according to Unicheck statistics, in Ukraine in 2018 the average rate of text matches in the system tested 33.16%" [Sidliarenko A., 2021]. Such research results make us look for different ways to overcome borrowing, falsification of data in the works, which leads to the idea of the importance of using the experience of other countries to ensure academic integrity in higher education institutions in Ukraine.

Active attention to the observance of academic integrity and the very concept in Germany was paid in the late twentieth century. For example, in 1998 a memorandum was adopted by the German Research Community, which "aimed to further promote honesty in science and establish it as an integral part of research and teaching" [Riven plahiatu…, 2021, p.3]. This document has been improved several times, and therefore in the modern version of the definition reads: "Scientific integrity is the basis of reliable science. It is an expression of scientific dedication, which includes respectful interaction with each other, with research participants, animals, cultural values and the environment, scientific integrity strengthens and promotes public confidence in science. The freedom of science guaranteed by the Constitution is inextricably linked to the corresponding responsibility. Fully take into account this responsibility and fix it as a reference point for their own actions – first of all the task of every scientist and those institutions where science is created" [Riven plahiatu…, 2021].

In Ukraine, much attention has been paid to academic integrity since 2017, as the Law of Ukraine "On Education" defined academic integrity as one of the principles of public policy. Note that Article 42 of this law provides the following definition: "Academic integrity is a set of ethical principles and statutory rules that should guide the participants in the educational process during training, teaching and conducting scientific (creative) activities to ensure confidence in learning outcomes and / or scientific (creative) achievements" [Zakon Ukrainy, 2021].

From the above definitions we can conclude that in the German version we have a broader coverage of the concept, because it indicates the important tolerant interaction with participants, animals and even cultural values. It should be noted that much later Ukraine began to take care of academic integrity at the legislative level, which makes it possible to extend the term and learn from the experience of other countries.

In order to receive funding from the German Research Community, German universities and non-higher education institutions must adhere to the basic principles approved in the 1998 Memorandum and extended by the 2019 Code: "Universities and non-university research institutions with

ISSN 1728-3817