

THE WORLD SPACE OF HIGHER EDUCATION: TRENDS IN INTERNATIONALIZATION AND DEVELOPMENT

Edited by N. Demyanenko

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**THE WORLD SPACE OF HIGHER EDUCATION:
TRENDS IN INTERNATIONALIZATION AND
DEVELOPMENT**

Monograph

Edited by N. Demyanenko

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The collective monograph "The World Space of Higher Education: Trends in Internationalization and Development" presents five sections developed based on the results of the author's research. Scientific and theoretical principles of internationalization of national higher education systems are revealed; modern models of university education are characterized; the Ukrainian historical practices of university autonomy in the context of modern interpretation of the principle of autonomy in university management are analyzed; the unity of education and science as an important condition for the organization of professional and pedagogical training of future specialists is substantiated; Innovative didactic technologies adapted to the educational environment of the university are offered. For scientific and pedagogical workers of higher education institutions, practical workers of the educational branch, scientists, students.

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Section IV. THE UNITY OF EDUCATION AND SCIENCE IN THE ACTIVITIES OF HIGHER EDUCATION

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4.1. HIGHER SCHOOL PEDAGOGY – SCIENCE, DISCIPLINE, PRACTICE

The unity of education and science in a higher education institute is an important condition for the process of improving the training of a future professional. A crucial role in the process of educating a future teacher belongs to the pedagogy of higher education.

As a theory and practice, the pedagogy of higher education has gone a long way. The prerequisites for its formation were laid in the XIX century. During this period the first classical universities were founded on the territory of Central, Eastern and Southern Ukraine: Kharkiv University (1804), St. Volodymyr University (1834), Novorosiiskyi University (1865), where the subjects of philosophical and pedagogical orientation were taught from the very first day of opening [3, p. 71].

The formation of higher education pedagogy is highly connected with the activity of these universities. They were the place where pedagogical institutes were opened (since 1804), and later pedagogical courses (since 1860) started to function, the main purpose of which was teacher training. In addition to courses in pedagogy and didactics, the students of these educational institutions also did some teaching practice. Those who were enrolled in a pedagogical institute received the candidate's degree. Gradually, some of them obtained a second degree (master's degree) and became university teachers [11, p. 19].

It is worth mentioning that in 1850 the Department of Pedagogy was opened at the historical and philological faculties of universities, which contributed to the separation of pedagogy from philosophy as a separate branch of science and academic discipline. In some faculties, pedagogy has become a compulsory training course [3, p. 71].

Thus, the first half of the nineteenth century marked the period when Ukrainian universities began to open separate departments of pedagogy. At that time, they provided the training of future teachers, and courses of pedagogy, didactics and teaching practice played a significant role in this process.

The second half of the XIX century was characterized by the desire to improve higher education and training of future teachers. During this period M. Pyrohov made a significant contribution to the development of higher education

pedagogy. It is believed that no one in domestic pedagogy approached so close to the disclosure of pedagogical opportunities in the educational process of higher education [9, p. 6]. In a series of articles that includes "What do we want?" (1859), "A Look at the General Statute of Our Universities" (1861), "Remarks on the Draft of the General Statute of the Imperial Russian Universities" (1862), "The University Question" (1863), "Letters from Heidelberg "(1863 – 1864) M. Pyrohov justified the need to reform higher education.

M. Pyrohov was one of the first to formulate and explain the principle of scientificity in higher education. He believed that education at universities should first of all activate the mental strength of students, involve them in an independent scientific activity, foster the development of their talent and true love for science. This is possible only when a teacher arouses students' interest in science during classes and at the same time equips them with a number of research methods. Mykola Ivanovych identifies scientific education not only as a means of acquiring knowledge, but also a necessary condition for human development. He argued that getting closer to science has a positive effect on the human spirit and public education [26, p. 776]. M. Pyrohov advocated the unity of education and research. In particular, he argued that it is impossible to separate an educational component from the scientific one at universities [24, p. 333].

In order to improve the educational process in universities M. Pyrohov studied foreign experience, the activities of Oxford and Cambridge universities in particular. He was especially interested in tutoring. However, he thought that it would be too expensive for our students to work with tutors. Therefore, Mykola Ivanovych advised to create separate groups for students, grouped by different subjects, and seminars for professors, with the obligation to study according to a certain program. He thought it could solve the problem of passive students at lectures and increase the efficiency of teaching. According to M. Pyrohov, participants will take an active part in the lectures and will be the students, not just listeners. This obligation is not forced; it is combined with a constant and independent activity of a student; it brings him/her closer to the teacher and often corresponds to the essence of the academic discipline, personality of the mentor, and personal abilities of a student [24, p. 382].

According to B. Pazynich, M. Pyrohov developed a method of heuristic conversation, which contributed to the emergence and spread of seminars in universities. As M. Pyrohov stated, a heuristic conversation is a "constant test of memory, imagination, attention and thought" [23, p. 17].

M. Pyrohov paid much attention to the issues of the teacher's personality and training. Developing the idea of the need to combine two elements – scientific and educational – he justified an important opinion that a university teacher is primarily a scientist who arouses interest in scientific activities in his/her students and is constantly advancing in science [23, p. 19]. Self-improvement should become the main task of university teachers [24, p. 330], so

M. Pyrohov suggested opening an institute of associate professors at universities to train future lecturers [24, p. 358].

In general, M. Pyrohov revealed the essence of educational, developmental and upbringing functions of higher education and the ways of their implementation. He also explained the principle of scientificity, the unity of education and science, the unification principles of education and upbringing, and visuals. He made a significant contribution to the development of lecture as a method and form of teaching. He gave much importance to the development of independence and activity of students [14, p. 117].

In the seventies and eighties of the XIX century, the works of other scholars on the didactics of higher education appeared in periodicals. In particular, in the Artillery Journal of the year 1870 a very interesting article by a K.O. entitled "A few words about lectures as a means of teaching science, applied to the Artillery Academy" was published. In the article, the author raises a number of important and relevant issues related to the lecture as a teaching method in higher education. K. O. addresses the problem of maintaining students' attention during lectures. The author argues that students' inattention is caused by a lack of understanding of what is being taught. K.O. believes that lectures are not necessary, because the exam answers of students who have listened to the lecture course do not differ from those who have not [6, p. 208]. In his opinion, the purpose of the lecture is "to provide appropriate information about the issues of a particular science and to provide a procedure for their studying" [6, p. 209]. K.O. questions the effectiveness of the verbal method of teaching. The author derives an axiom which says that the depth of understanding is proportional to the time used for thinking [6, p. 209]. In his opinion, the lecturer pays attention only to the logic of presentation, sequence of the material and conclusions, but does not pay attention to whether all students had enough time to reflect and analyze the information.

Therefore, the author raises issues related to the difficulties of applying the basic principles of learning at lectures: strength of knowledge, consciousness and activity, systematicity and consistency, accessibility, although the author does not call them the principles of learning [12, p. 324].

The author of the article notes that sometimes a lecture becomes a useless conversation of the professor with him/herself [6, p. 211]. The lecturer often repeats, cites textbooks which students can read on their own. He is of the opinion that students are passive in the lectures. Lectures do not promote the activity of students, do not force them to consciously acquire knowledge, because it is presented in a ready-made form.

Eleven years later in 1881, as a mature university teacher, the author of the article (Gerasimov) opposed to lectures for the second time and even more strongly. He published a book "Elimination of lectures in the academic or university system of teaching sciences", the title of which immediately reveals the author's attitude to the lecture as a method of teaching [29, p. 15].

Approximately the same views on the lecture were expressed in 1870, and then in 1876 by N. Varadinov, a professor of the University of Dorpat. In the article of 1876 "University Lectures", the author talks about the uselessness of lectures and says that it is better for students to learn by textbooks. At the same time, N. Varadinov supports introductory lectures. He sees the purpose of lecturers and lectures in counseling and mentoring, which should create the link between theory and practice. N. Varadinov argues that "if you allow lecturing at the university, it should be considered necessary only in those areas of science that the student did not study in a gymnasium... [28, p. 2]; "We find it useful to read lectures, which direct students to the independent studying of science" [28, p. 7].

Thus, in the second half of the nineteenth century a number of accurate and debatable issues were raised, such as: the content of lectures, their scientific nature, emotional presentation, retelling textbooks by lecturers, the connection of lectures with an independent work of students, activity and conscious knowledge acquisition, the connection of theory with practice, the role of the lecturer as a consultant and mentor. The disadvantages of the lectures were pointed out: the difficulty of organizing feedback and implementing an individual approach, passive students, nurturing a habit to learn from ready-made materials. It was in the second half of the nineteenth century when scholars expressed thoughts about the elimination of lectures in higher education, their uselessness and even a negative effect. For the first time, they started thinking how to improve the lecture system of teaching, there were ideas in tune with the modern issues like the role of the teacher as a consultant and moderator of the educational process, the use of lectures along with other forms of learning: seminars, practical classes, independent work of students and their interdependence [12, p. 325 - 326].

In the early twentieth century, the works by B. Weinberg, A. Herzen, V. Hessen, P. Kazansky, N. Kareev, A. Klossovsky, V. Klyuchevsky, L. Petrazhitsky, V. Ostrogorsky were published, which address the organization of the educational process in higher education, methods of teaching certain disciplines, lecturing skills, and the lecture system in universities [29, p. 156-157].

One of the most important works of the early twentieth century, which contains attempts to explain a pedagogical approach to the educational process in higher education institutions, is considered to be a monograph "University and Science", written by L. Petrazhytsky and published in 2 volumes in 1907. The author gave a number of important pieces of advice concerning educational process. He wrote about the combination of scientific content of the subject with the pedagogical skill. His idea was that the teacher should capture the listener "not by the beauty of his/her speech», but clarity of mind and certainty of scientific problems [9, p. 5].

The scholar writes a number of recommendations concerning the methods of lecturing in order to eliminate existing drawbacks in the lecture teaching system. L. Petrazhytsky argues that the lecture should develop students' scientific thinking and, therefore, the professor's duty is to involve students in science, force them to

be interested in it and do it not only for a while, not just to pass the exam or in the form of "memorizing the textbook for the test" but to evoke respect for lectures, interest and love for science and the "scientific spirit and scientific inspiration" in students' souls [29, p. 23]. As can be seen, L. Petrazhysky's points of view completely coincide with M. Pyrohov's.

"Organization and methods in higher education institutions and secondary school" was published in 1934. In this work, I. Autukhova, I. Ogorodnikov, A. Khanta made an attempt to systematically present the main organizational and methodological problems of education in higher education institutions in the former Soviet Union [10, p. 16].

It is worth saying that in 1940, under the editorship of S. Chavdarov, the textbook "Pedagogy" was first published in the Ukrainian language for higher education institutions and particularly for pedagogical institutes [27, p. 338].

Therefore, the nineteenth and the first half of the twentieth century was the period when the pedagogy of higher education was considered as a separate science or academic discipline, but the conditions for their separation were laid. Higher education pedagogy was developing within the framework of pedagogy, however, the first works were mainly devoted to the problems of the didactics of higher education. These are the articles by M. Pyrohov "Questions of Life" (1856), "University Question" (1863), V. Gerasimov "A few words about lecture as a method of teaching science that is used in the Artillery Academy" (1870), "Elimination of lecturing in the academic or university system of teaching science" (1881) and N. Varadinov's "University lectures" (1876) and others. At the beginning of the twentieth century, the works of B. Weinberg, A. Herzen, V. Hessen, P. Kazansky, N. Kareev, A. Klossovsky, V. Klyuchevsky, L. Petrazhysky and V. Ostrogorsky were published. These works consider the organization of the educational process in higher education institutions, methods of teaching certain disciplines, lecturing skills, lecture system in higher education institutions.

The raised issues find their continuation in the next explorations of the first half of the twentieth century by such scientists as N. Bauman, S. Bogoslovsky, A. Vagin, M. Eskin, G. Zhurakovsky, P. Zaichenko, S. Zinoviev, A. Kireev, E. Medinsky, N. Rubinstein and many others. Under the editorship of S. Chavdarov, the textbook "Pedagogy" was published in Ukrainian for the first time for higher education institutions in 1940, particularly for pedagogical institutes. It should be emphasized that the principles of scientificity were being formed during this period. Moreover, the unity of educational and scientific process in higher education institutions is also substantiated, and the foundations of training future teachers are laid. The requirements for the personality of a teacher are put forward and the idea of a university teacher is formed not only as a lecturer but also as a scientist. Pedagogy of higher education institutions develops mainly as empirically constructed approaches of individual teachers who are involved in the process of organization of the educational process in higher education institutions.

The second half of the twentieth century, especially the 50s and 60s, is characterized by a huge number of government decrees concerning the development of higher education ("Measures of improvement the research process in higher education institutions" (1956), "Measures of improvement the training and certification of scientific and pedagogical staff" (1956), "Measures of the further development of higher and secondary education, improving the training and usage of specialists" (1963), "Measures of improvement the training process of specialists and improvement of leadership during higher and secondary education in the country" (1966) and many other [5, pp. 13-14]. They stimulated and intensified research process in the field of pedagogy of higher education institutions. So, according to B. Korotyaev, E. Grishin, O. Ustenko, 8492 works were published about the problems of higher education in the period from 1950 to 1960. The number of works focused on the problems of higher education has been growing every year since 1960 [10, p. 16-17].

The term "the pedagogy of higher education" appeared in the sixties of the twentieth century. By the way, the use of the term "didactics of higher education" was formulated earlier, in the fifties of the twentieth century in the work of P. Zaichenko "Some issues of didactics of higher education institutions" (1953) [4, p. 154]. Scientists of that time admit the fact of separation and formation of a new science. Its emergence is associated with setting new goals for higher education. It was about improving the quality of training the future professionals. The way of achieving this goal was seen in improving the teaching process of all sciences by upgrading traditional forms of education and the introduction of new scientific methods. In this regard, departments of pedagogy and psychology of higher education institutions were beginning to appear in some universities of the former Soviet Union [4, p. 8].

There is an opinion among the scientists that thanks to B. Ananiev a new direction of scientific research has started. He was a representative of the Leningrad School of Psychology. The research of the peculiarities of the mental development of an adult and the learning abilities at different stages of life was conducted in the sixties of the twentieth century. The Department of Pedagogy and Pedagogical Psychology was established at Leningrad State University in 1966. It was one of the first to develop the problems of learning in adulthood. The Department laid the foundations for the creation of a new doctrine in the structure of psychological and pedagogical science of that period – psychology and pedagogy of higher education institutions [20, p. 18]

Also, the Ministry of Higher and Secondary Education of the USSR established the Scientific and Methodological Council for Pedagogy of Higher Educational Institutions in 1966. The main task of this Council was to coordinate all researches concerning the problems in this field [4, p. 9].

The works of S. Arkhangelsky, V. Zagvyazinsky, S. Zinoviev, N. Kuzmina, and N. Nikandrov became significant achievements of Russian scientists in this

period. The work of S. Zinoviev "Educational process in the Soviet higher education institutions" (Moscow, 1968) is one of the first and most fundamental monographs. It is focused on the main issues of organization and methods of training future professionals in higher education process, didactics (teaching theory) of higher education institutions [30, p. 5].

In the overall, special attention is paid to the training of future teachers during this period because the leading role in achieving the goals set for higher education was played by the teaching staff of the universities. Replenishment of scientific and pedagogical staff of higher education institutions took place through the alumni and graduate students, whose studying programmes did not provide for a thorough study of pedagogy and psychology. That is why, in the sixties of the twentieth century, teachers and graduate students started to study a new course "Pedagogy of higher education institutions" in the leading institutions of higher education of the former Soviet Union, including the University of Kyiv [4, p. 8].

This fact necessitated the development of appropriate textbooks and manuals. So, the first textbooks were "Pedagogy of higher education institutions" edited by P. Gaponov (Voronezh, 1969), "Pedagogy of higher education institutions" edited by Y. Babansky (Rostov n / D, 1972), "The basis of pedagogy at universities" edited by N. Kuzmina (Leningrad, 1972); "Pedagogy of higher education institutions" edited by N. Nikandrov (Leningrad, 1974).

The pedagogy of higher education was defined as the science of teaching and communist education of students. It was about the formation of the personality of a specialist of higher qualification. Its subject was the study of a special type of pedagogical activity, aimed at revealing the patterns and rational ways of learning and the formation of the Soviet specialist of higher qualification [4, p. 12].

A significant contribution to the formation and development of the pedagogy of higher education was made by such Ukrainian scientists as A. Alekseyuk, A. Bondar, M. Grishchenko, D. Elkin, I. Kobylyatsky, O. Moroz, I. Reinhard, V. Tkachuk, etc.

I. Kobylyatskyi was one of the first Ukrainian scholars who seriously studied the problems of higher education pedagogy, the moments of its history in particular. "Methods of educational work in higher education institutions" (monograph) (Lviv, 1970), "Didactic basis of the educational process in higher education institutions (lecture texts)" (Odessa, 1972), "Scientific and pedagogical bases of educational work in higher education institutions (texts of lectures)" (Odessa, 1974), "Pedagogical recommendations for university teachers" (Odessa, 1975), "Methods of training and formation of the specialist in higher education institutions" and many other important works of the scientist, who revealed the fundamental issues of this science. [17].

According to the scholar, the pedagogy of higher education began to develop intensively in the seventies of the twentieth century. The nature of scientific works changed significantly at that time. The publications with general

and common information became less prevalent, but specific aspects of the educational process began to be studied more deeply [9, p. 10].

The scientist drew attention to the fact that the educational process in higher education and the formation of a highly qualified specialist had their own laws and required scientific and pedagogical justification. At the same time, there was no clearly defined science of training and formation of such a specialist in higher education institution [7, p. 3]. I. Kobylyatskyi comes to the conclusion that important research, a lot of experimental and theoretical material necessary for the formation of pedagogy of higher education institutions as a science has already been accumulated [9, p. 13]. He substantiated a new scientific field as a science of training and education of a highly qualified specialist, emphasizing that it is a subsidiary science that derived from general pedagogy and has a common methodological basis and, having its own specifics and subject at the same time. I. Kobylyatskyi also stood for the necessity to introduce the discipline "Pedagogy of higher education institutions" into the university course. The scholar defined four sections of pedagogy of higher education institutions (general issues; didactics; theory and methods of education; management of educational and scientific activities) and ways of further development of pedagogy of higher education institutions as a science. The latter are the generalization of rich scientific and pedagogical experience of universities, departments, certain scientist, teachers and student groups; widespread introduction of pedagogical experiments in universities of all major specialties [17].

Despite the fact that the didactics of higher education is included in the pedagogy of higher education, it is defined as a science of the essence and regularities of learning, the content of education, the organization of the educational process, methods of teaching and learning in higher education institution. It is also described as a theory of education and training of a specialist [8, p. 17].

I. Kobylyatsky made a significant contribution to the substantiation of teaching methods in higher education institutions. In particular, the scholar emphasized the significant difference between teaching methods in secondary school and higher education institution. The teacher argued that university teaching methods are not a simple means of transferring and understanding knowledge, but methods of entering into the development of science, the disclosure of its methodological basis. Therefore, according to the scholar, teaching methods in universities can be viewed as scientific methods [9, p. 78]. I. Kobylyatsky was convinced that teaching methods in higher education institutions are not only a means of transferring and assimilating knowledge, but also forms of organizing classes. That is why he identified teaching methods with forms of the provision of education. He also developed his own classification of teaching methods that identified three groups of methods:

- 1) methods that ensure the transferring, perception and assimilation of knowledge and the formation of judgments (lectures, self-study work, observation, counseling, instruction, perception of TV and radio programs, programme material);

2) methods of application and consolidation of knowledge, development of skills, enhancing of judgments (seminars and practical classes, lab works, tests, IT classes, manufacturing job, teaching practice at school and other places of educating and industrial practices);

3) methods of treatment of knowledge, formation of judgments and professional training of students (current study of students' learning activities, colloquia, interviews, term papers and their evaluation, methods of final evaluation, term exams and tests, term projects and graduating) [9, p. 8 - 83].

I. Kobylyatsky believed that such division of teaching methods corresponds to the logic of the educational process in higher education institutions.

From our point of view, the greatest achievement of the scholar in the matter of teaching methods in higher education institutions was determining the effectiveness of methods. I. Kobylyatsky believed that the improvement of teaching methods was not related to the time of their emergence and that the elimination of "old" methods and their replacement with the "new" ones could not solve the problem. The idea was that it was necessary to develop criteria for the effectiveness of teaching methods. I. Kobylyatsky believed that the pedagogical effectiveness of any teaching method was determined not by the amount of knowledge transferred to students, but by the degree and nature of the impact on the consciousness and feelings of the student. It was about the level of their intellectual and creative activity, rather than simple perception and memorization of facts and theoretical facts of the lecture [9, p. 76 - 77].

Generally, the scholar significantly developed the pedagogical theory, highlighted the features of the learning process in higher education institutions, indicated its patterns, formulated the principles of higher school didactics and substantiated the system of teaching methods in higher education institutions. Another achievement of I. Kobylyatsky was the publication of the tutorial "Basis of Higher School Pedagogy" (Kyiv – Odessa, 1978), that became the first Ukrainian (of course in Russian) and the main manual for students, alumni and teachers for a very long period of time. This tutorial was very important for all who were interested in teaching in higher education institutions. It is worth noting that this manual was republished in China and the name of the scientist is included in the encyclopedia of this country [17, p. 39].

A. Bondar was one of the first who studied the problems of higher education pedagogy in 1960s-1970s. He focused on substantiating the forms of organization of the educational process in higher education institutions. He studied the preparation and organization of seminars, practical tasks, lab classes, self-study work and practical training. His professional scientific interest in the problems of higher education didactics was caused by a change of employment. Among other things, A. Bondar began his career at the Taras Shevchenko National University of Kyiv in 1963 and it was during this period when his main works were published: "Organization of pedagogical practice of students" (Kyiv, 1969), "Pedagogical

practice of students" (co-author) (Kyiv, 1972), "Seminars in higher education institutions" (Kyiv, 1974), "Lab and practical work in higher education institutions" (co-author with L. Ranska) (Kyiv, 1977), etc.

We consider the greatest merit of A. Bondar to be the generalization of professional practical experience of certain teachers, groups of establishments of higher education institutions that was involved in the organization of seminars, lab works, practical classes, consultations. He summarized the types of seminars, developed their structure and methods on the basis of the study of advanced pedagogical experience. After studying the experience of higher education institutions, the scholar came to the conclusion that there were several basic methods of lab and practical work – the frontal method, the workshop method and the method of doing work in cycles (thematic workshop).

A. Bondar paid great attention to the practical training of students. His points of view were set out in the following works: "Organization of pedagogical practice of students" (Kiev, 1969) and "Pedagogical practice of students" (Kiev, 1972). They concerned the place of pedagogical practice in the system of preparing students for working at school, features of different types of practice, preparation of students for teaching practice, planning by supervisors; preparation of students for practice in the process of studying pedagogy, etc. According to A. Bondar, the leading role in the preparation for the professional activity of a future teacher belongs to pedagogy. During the study of this science, students must master not only theoretical knowledge, but also acquire practical skills. This can be achieved by applying practical tasks, solving pedagogical problems, specific situations of production during the pedagogy classes [18].

M. Hryshchenko also studied the didactic problems of higher education pedagogy in 1960 s. He wrote about the organization of independent educational work of students, raises the question of ensuring the effectiveness of pedagogical practice, explores the peculiarities of educational work with freshmen, their adaptation to the conditions of education, develops methodological pieces of advice for young teachers, etc. (books "Learn how to work independently", 1969; "Educational work with freshmen", 1974). His book "Didactic advice to a young teacher" was published in 1973. M. Gryshchenko shared his thoughts and rich pedagogical experience concerning lecturing in this manual. He also wrote about the rules of conducting seminars and lab classes, organizing counseling for students, guiding their individual educational work, involving them in scientific work, etc. [27, p. 471].

It is important to note that M. Hryshchenko focused on the organization of independent work of students and the training of future teachers. The scholar determined the main levels of psychological and pedagogical training of teachers and the organization of the pedagogical process in higher education institutions; he proved the efficiency of educational influence of such methods as lecture, explanations, examples; the basic principles of higher education didactics were

substantiated; the place and directions of research work of students in higher education institutions were determined; he proposed new forms of requalification of teachers [19, p. 62].

I. Reinard also made a significant contribution to the development of higher education pedagogy. In particular, he was the Head of the Department of Pedagogy and Psychology of Dnipropetrovsk State University from 1968 to 1978. Under the direction of I. Reinard, the department became not only an important educational unit of the university, but also a well-known center in Ukraine in the sphere of the pedagogy of higher education. I. Reinard managed to gather a team of like-minded people. His scientific school of information and psychological approach to the organization of educational information in higher education institutions was formed during that period of his life. Together with colleagues he published a number of articles concerning the problems of higher education pedagogy: "Exam model and assessment criteria" (I. Reinard, A. Kuprin, 1972), "How to improve the lab workshop in universities" (I. Reinard, L. Sukhinskaya, 1972), "Ordering the system of information perception" (I. Reinard, L. Sukhinskaya, E. Pochernina, 1975), "Complexity, difficulty and number of descriptive information in the educational process" (I. Reinard, E. Pochernina, I. Safro, 1979). Under his leadership, the Department of Pedagogy and Psychology of Dnipropetrovsk State University published a collection of scientific works entitled "Didactics and Theory of Education in Higher Education Institutions". The results of different researches of the teaching staff of this Department were published there.

The result of the productive work of like-minded colleagues (I. Reinard, V. Tkachuk, E. Korobov, N. Menshikova, L. Pavaska, O. Pochernina, I. Raspopov, L. Sukhinskaya, G. Ugoleva and members of his scientific school) was an educational tutorial "Basics of higher education pedagogy" (I. Reinard, V. Tkachuk, Dnepropetrovsk, 1980). The authors of the educational publication strongly recommended to introduce an information and psychological approach in the learning process of students, which in their opinion would contribute to the optimization of the relationship and interaction between a teacher, a student and teaching methods in the educational process [15, p. 21 - 22].

According to I. Reinard, the most important requirement for the organization of the educational process should be its high manageability. He said that only a well-ordered process can be successfully managed. Accordingly, the learning process in higher education institutions, according to the scholar, should be well-ordered [25, p. 7]. Thus, the leading principle of higher education should be the principle of streamlining the educational process in higher education institutions, and he was the first to identify and justify it. The components of this principle were defined as a rationally organized structure, appropriate standardization and optimal rhythm of the educational process [25, p. 7 - 9].

It is worth noting that in the 1970s there was a hot discussion about the justification of the leading principles of higher education didactics. Each scholar

tried to define his principles, because the pedagogy of higher education was not fully formed as a science and contained many issues that had not yet been proved, had not received a general definition and remained controversial. At the same time, everyone understood that the didactics of higher education institutions could not use the principles of school didactics, they could not be adapted to the conditions of education in universities. Identifying the principles of didactics in higher education institutions, scholars came from the specific features, patterns of education, the unity of education and upbringing, the main trends in the educational process and the challenges that it was facing. However, some scholars noted that some of their names would coincide with the names of the principles of school didactics, although they would be radically different in content. Other scholars, for example F. Naumenko, did not even allow coincidence in the names. They believed that it would contribute to disorientation and would not correspond to the specifics of education in higher education institutions. Meanwhile, not all scholars have contrasted the principles of didactics in higher education institutions with general didactics. In general, the leading principles of education in higher education institutions included the following: unity of education and science, unity of theoretical and practical training, taking into account the individual characteristics of students, involving students in scientific work [16, p. 38].

In general, the period of 1960s-1970s can be characterized by a serious increase in publications, works in which specific aspects of the educational process of higher education institutions were beginning to be studied more deeply. Ukrainian scholars were beginning to pay considerable attention to the justification of the studying process in higher education institutions. They were trying to study its differences from the educational process in secondary school to identify its specific features, laws, patterns and principles. It became clear that the educational process in a higher education institution was not identical to the educational process of a high school. Automatical transferring of the provisions of school didactics in the didactics of higher education was not correct. In other words, adapting the school principles of didactics to the conditions of studying in a higher education institution was not effective.

A new stage in the development of pedagogy of higher education institutions as a science and academic discipline begins in the 1990s. In particular, research institutes of pedagogy and psychology of professional education and higher education were established in Ukraine. Some new periodicals were launched that published materials about the organization of the educational process in higher education institutions. "Pedagogy of higher education institutions" was introduced as a compulsory subject in the graduate degree program. The Departments of Pedagogy of Kharkiv State University (V. Mikhailovsky), Kyiv National Linguistic University (V. Galuzynsky, M. Yevtukh), Taras Shevchenko National University of Kyiv (A. Aleksyuk) made a thorough research. The works of A. Aleksyuk, V. Galuzynsky, G. Hryshchenko, M. Yevtukh, B. Kobzar,

B. Korotyayev, O. Moroz, Z. Slepkan became significant scientific achievements of Ukrainian scholars in the development of important problems of pedagogy in higher education institutions.

B. Korotyayev, E.O. Grishin, O.A. Ustenko published the first pedagogical textbook in Ukrainian entitled "Pedagogy of Higher Education Institutions" in 1990. They defined it as a branch of pedagogical science, which describes and explains the processes of education, training and specialist training in higher education institutions. On this basis, it develops scientific recommendations and prescriptions regarding the professional and pedagogical organization of these processes or their transformation in accordance with the goals, as well as predicts further development. The object of pedagogy of higher education institutions is defined as the real pedagogical reality, which functions in the structure of these institutions and the structure of management. This science is studied by means of its language. The subject of pedagogy of higher education institutions is the connections and relationships that lie in the structures of the pedagogical reality. The science studies the logical nature, explains and justifies facts that are based on the application of its research methods [10, p. 5].

V. Mikhailovsky published a textbook "Pedagogy of higher education institutions" in 1991. There he revealed the patterns of teaching and education in higher education institutions basing on the ideas of the pedagogy of cooperation. The main task of pedagogy of higher education institutions, in his opinion, is to develop scientifically proved ways to train modern teachers who can work with students in the direction of cooperation, solidarity, full understanding. All of this can develop natural talents, abilities and skills, independence and creativity of students [21, p. 17].

In 1988, A. Aleksyuk began an experiment on the introduction of modular tutoring technology in the educational process of higher education institutions on the basis of the Department of Pedagogy of Secondary and Higher Education of Taras Shevchenko National University of Kyiv. The purpose of experimental research was to make the independent work of students a real basis for the educational process in the student audience [2, p. 4-5]. As a result, he published a tutorial "Pedagogy of higher education institutions. Course of lectures: modular training" (Kyiv, 1993) and the first textbook written in Ukrainian "Pedagogy of higher education institutions in Ukraine. History. Theory" (Kyiv, 1998).

It should be noted that A. Aleksyuk defined the subject of pedagogy of higher education institutions for the first time and took into account the national peculiarities of the educational process: the process of creating and functioning of real relations between students in higher educational institutions, which provide the opportunity to form a spiritually rich, virtuous and conscious citizen, a professional in various sectors of the economy (science, technology, culture, education, etc.), a patriot of Ukraine [1, p. 87].

At this time, O. Moroz also researched some issues of the pedagogy of higher education institutions. He substantiated the system of continuous

pedagogical education, forms of adaptation of the first-year students to the study process in higher education institutions, the content and organization of individual work of the first-year students, stages of professional adaptation of a young teacher, psychological and pedagogical training of a teacher. He also established a scientific school in the field of pedagogy of higher education institutions. Its representatives, who were led by O. Moroz, developed the ways of improving the management of professional training of future teachers, the problems of adaptation of young teachers, as well as the problems of psychological and pedagogical training of future teachers of higher education. His ideas, developed by the representatives of his scientific school, were embodied in the main provisions of the state educational documents: State Program "Teacher" (2002), National Strategy for Education Development in Ukraine (2012 - 2021), Sectoral concept of continuous pedagogical education and development (2013). M. Korets, A. Kuzminsky, V. Luhovy, L. Savenkova, S. Yashanov and others became the students of O. Moroz and his scientific school. [22].

In general, the necessity of the emergence of a new scientific branch – the pedagogy of higher education was proved by Ukrainian scholars in the second half of the twentieth century. Its object, subject and structure were substantiated. Features of educational process in higher education institutions, specific principles, methods, forms of training, the maintenance of pedagogical education were also defined. The processes of adaptation of freshmen to conditions of training in institutions of higher education and professional adaptation of young teachers were also described. Scholars did quite serious work concerning the study, generalization and theoretical justification of advanced pedagogical experience in the organization of the educational process in higher education institutions. Ukrainian scholars (I. Reinhard, O. Moroz) also founded scientific schools in the field of pedagogy of higher education institutions.

Active research in the sphere of pedagogy of higher education institutions was carried out at the beginning of the XXI century. The evidence of this was the opening of departments of pedagogy of higher education institutions and a new specialty. Moreover, the Department of Pedagogy and Psychology of Higher Education Institutions was opened in the National Pedagogical University in 2000. It was headed by O. Moroz – Doctor of Pedagogical Sciences, Professor and Academician of the Academy of Pedagogical Sciences of Ukraine. In the 2005-2006 academic years, the Department of History of Educational Systems and Technologies (Professor N. Demyanenko – Head of the Department, Doctor of Pedagogical Sciences) licensed and accredited the specialty in the graduation program "Pedagogy of higher education institutions". The departments were merged in 2009. N. Demyanenko was elected the Head of the joint department of pedagogy and psychology of the higher education institutions. Master students have been successfully trained in the specialty "Pedagogy of Higher Education Institutions" under the leadership of N. Demyanenko for almost 15 years. The

specialty also had educational and methodological support (in particular, "Educational and methodical complex: 8.000005 – Pedagogy of higher education institutions", K., 2008, 2011; "Program and methodical recommendations on the organization, maintenance and assessment of effective and continuous practice", K., 2010; Means of diagnosing the quality of training (sets of test tasks, complex tests), K., 2011, etc.); and introduced scientific and pedagogical practice in the unity of three components: research institutions practice, archive and museum.

Together with the Institute of Higher Education of the National Academy of Pedagogical Sciences of Ukraine, teachers of the department developed and published a tutorial "Pedagogy of Higher Education Institutions" with the mark of the Ministry of Education and Science of Ukraine (K., 2009). Training of the future teachers is carried out on the tutoring technology. Department of Pedagogy and Psychology of the Higher Education of National Pedagogical University was also the initiator and organizer of the All-Ukrainian Morozov pedagogical readings, which address current issues of pedagogy of higher educational institutions. The first readings took place on February 12-13, 2010.

Despite the fact that research in the field of pedagogy of higher educational institutions has been going on for more than half a century, a single definition of this concept is not found. Nevertheless, the discipline «Pedagogy of higher educational institutions» has been introduced and many Ukrainian textbooks and manuals on have been published. The analysis of the Ukrainian educational literature for the period of 1990-2013 testifies to the presence of a large number of formulations of the object and subject of the pedagogy of higher educational institutions. Its object often includes:

- 1) true pedagogical reality, which is functioning in the structure of higher education institutions and management structure,
- 2) the system of higher education and the pedagogical process in it,
- 3) the student in the process of higher education. Its subject includes:
 - a) the process of professional training of future specialists of the highest qualification;
 - b) the process of teaching and educating students in higher educational institutions;
 - v) specially and purposefully organized process of interaction between teachers and students.

However, there is also literature (textbooks, manuals, reference books), which does not consider these concepts at all or covers the categorical and conceptual apparatus of general pedagogy. Vagueness, inconsistency in the definition of the object and subject of pedagogy of higher education institutions indicates the lack of development of its methodology, which terminates the development of this science to some extent [13].

It should be noted that in 2015 the Cabinet of Ministers of Ukraine issued a resolution "On approval the list of specialties and fields of knowledge which are

used in higher education process". According to this list, the specialty "Pedagogy of higher education institutions" under this proper name stopped its existing and became part of specialty № 011 "Science about Education" (since 2017 "Educational, pedagogical sciences") as an educational and professional program, particularly at the National Pedagogical Drahomanov University. It is also necessary to underline that the educational course "Pedagogy of higher education institutions" in recent years has stopped being mandatory for graduate students and we might see a tendency of reducing the number of hours devoted to the study of the subject or its complete elimination among master degree students.

Nowadays it is possible to enumerate such controversial points in developing of the pedagogy of higher education as:

1) while the state and society constantly upgrades their requirements for the quality of training future teachers, one can trace the elimination of this specialization, or its functioning only as a studying programme, adding the non-compulsory studying course "higher education pedagogy" and reduction of its scope;

2) increase in research on higher education, training of future professionals, and at the same time the lack of fundamental research on the pedagogy of higher education and research that would summarize the best pedagogical experience.

Thus, the study of the process of formation and development of pedagogy of higher education institutions as a science, discipline and practice allows us to distinguish four stages.

The nineteenth – the first half of the twentieth century is a period when the preconditions are laid for the separation of pedagogy of higher education as a science and academic discipline. The pedagogy of higher education develops within the framework of pedagogy. However, the first works appear and a lot of them are devoted to the problems of didactics of higher education institutions. The principles of scientificity, the unity of educational and scientific processes of higher education are substantiated during this period. The foundations of training the future teachers are laid. The requirements are set for the personality of a future specialist and the idea of a university teacher is formed not only as a lecturer but also as a scientist. The pedagogy of higher education develops mainly as empirically composed approaches of certain teachers who are involved in the organization of the educational process in higher education institutions;

1960s – 1980s is a period of an active development of the pedagogy of higher education institutions as a science and academic discipline. The term "pedagogy of higher education institutions" appeared during this period of time. The scholars of that time admitted the fact of separation and formation of a new scientific field. Departments of pedagogy began to open in the universities. For the first time, the discipline "Pedagogy of higher education institutions" began to be taught at universities and graduate students began to study it. The first textbooks were published: "Pedagogy of higher education institutions" edited by P. Gaponov (Voronezh, 1969). The first Ukrainian textbook was published by I. Kobylatsky

"The basis of pedagogy of higher education institutions" (Kyiv – Odessa, 1978) (in Russian). A significant contribution to the formation and development of the pedagogy of higher education institutions was made by Ukrainian scientists such as A. Aleksyuk, A. Bondar, M. Gryshchenko, D. Elkin, I. Kobylatsky, O. Moroz, I. Reinhard, V. Tkachuk and many others. The first scientific schools in the field of pedagogy of higher education institutions were founded by Ukrainian scientists I. Reinhard and O. Moroz during this period of time;

1990s – 2014 is a period of the independence of Ukraine and development of the pedagogy of higher education. At this time, there is a deep research in this area. An introduction of "Pedagogy of higher education institutions" is a compulsory subject in the university curriculum. We can admit the publication of the first manuals in Ukrainian "Pedagogy of higher education institutions" (Kyiv, 1990) by B. Korotyaev, E. Grishin, O. Ustenko and the textbook "Pedagogy of Higher Education Institutions of Ukraine. History. Theory" (Kyiv, 1998) by A. Aleksyuk. Future teachers who are doing their Master's degree have been studying "Pedagogy of higher education institutions" since 2005;

2015 – till now is a period of uncertainty. The further development of higher education pedagogy is not defined.

Nowadays, the methodology of the pedagogy of higher education institutions remains undeveloped. The level of defining the object and the subject are not totally clear. The theory of education needs further development. There are no comprehensive studies of the process of formation and development of the pedagogy of higher education institutions as a science. These and many other issues in the development of pedagogy of higher education institutions need an urgent study, generalization and justification. In addition, we see the loss of leadership positions in the pedagogy of higher education in the training of future teachers in favor of andragogy. However, the quality of training of future specialists and teachers of the higher education system has always been the focus of the society, scientists and the whole country.

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