The practical experience of using the LIKAR_NMU distance platform as a corporate version of the open-source Moodle system has revealed that the following LIKAR_NMU resources are most in demand among teachers and students of higher pharmaceutical education when teaching medicines standardisation: «Book»; «Inscription/Title»; «Pages»; «Folder/Directory»; «File»; «IMS content package»; «URL (web link)» and successfully proved the activities available in the menu of the LIKAR_NMU distance platform, in particular: «H5S»; «Database»; «Selection»; «Wiki»; «Glossary»; «Tasks & Assignments»; «Chat».

It has been established that due to the flexibility of the resources of the LIKAR_NMU distance platform, the teacher can create and manage the e-learning course «Standardisation of Medicines», namely, personally control access to it; create author’s systems for assessing students’ learning achievements; use time limits for completing various types of tasks; determine the timing of sending assignments, webcases, tests completed by students, while recording the timeliness / untimeliness of their receipt for verification, etc. In addition to the function of assessing the knowledge of future masters of pharmacy, the LIKAR_NMU distance platform has mechanisms for storing current grades of each student, setting up a grading scale, semi-automatic recalculation of test results, etc.

**Key words:** higher pharmaceutical education; institutions of higher medical (pharmaceutical) education; training in medicines standardisation; future pharmacists; LIKAR_NMU distance learning platform.

**METHODOLOGICAL APPROACHES TO MANAGEMENT OF THE EDUCATIONAL ENVIRONMENT OF THE PROFESSIONAL DEVELOPMENT OF TEACHERS**

The article considers the main methodological approaches to the management of the educational environment for the professional development of teachers. The results of the study made it possible to single out those methodological approaches that most closely correspond to the process of managing the educational environment of the professional development of teachers in the institution of general secondary education. Among them are systemic, person-oriented, competence, activity, environmental, cultural, synergistic, acmeological, andrological, axiological, technological, qualitative and diagnostic. The mentioned approaches do not contradict each other, but, on the contrary, complement each other, which ensures the choice of the tactics of scientific research, which is related to the development of a system of management of the educational environment for the professional development of teachers in an institution of general secondary education.

**Key words:** methodology, approach, professional development, teacher, educational environment.
approach, according to V. Frytsiuk (Frytsiuk, 2016, p. 19), is the starting point for the implementation of activities aimed at continuous professional self-development of teachers.

As we can see, the theoretical and methodological analysis of scientific sources allows us to formulate the definition of this concept. By the methodological approach, we understand the set of principles that underlie the strategy of research activities on the management of the educational environment for the professional development of teachers, as well as the methods, techniques, and procedures that ensure the implementation of the chosen strategy in practical activities.

The purpose of the article is to substantiate the integrity of methodological approaches to managing the educational environment for the professional development of teachers.

Presentation of the main research material. In the methodology of pedagogical research, different approaches are distinguished, which make it possible to consider certain phenomena from different angles based on a separate aspect. In this connection, O. Otych (Otych, 2010, p. 41) notes that in modern pedagogical science, along with traditional methodological approaches, which are firmly established in scientific research on the problems of humanistic pedagogy (personal, individual, differentiated, activity, axiological, anthropological, existential, acmeological, contextual, competence), an increasingly important place possess new methodological approaches (polysubject, creative, mediaological, semiotic, holistic, hermeneutic, civilizational, phenomenological), which, in the scientist's opinion, are more consistent with modern social and educational realities.

V. Sharko (Sharko, 2006, p. 85) singles out the following approaches to teacher training: humanistic, acmeological, praxeological, competence-based, systemic, synergistic, axiological, hermeneutic, cultural, activity-based, reflective, technological, personally oriented, integrative, andragogical, adaptive, contextual. Such diversity allows scientists to choose one or another approach. However, considering the fact that it is difficult to understand the essence of the subject of research from the standpoint of only one approach, scientists often rely on a combination of several approaches.

In our study, the process of managing the educational environment of professional development of teachers is based on several interrelated scientific approaches, in particular, systemic, person-oriented, competence, activity, environmental, cultural, synergistic, acmeological, andragogical, axiological, technological, qualitative, diagnostic. Let's dwell in more detail on their characteristics.

One of the leading methodological approaches is the systemic approach, the essence of which is that the object is studied as a whole set of elements in a set of relations and connections between them, that is, as a system. The systemic approach is one of the fundamental classic approaches of modern scientific knowledge, which involves the study of phenomena not in isolation, as an autonomous unit, but as the interaction and connections of various components of the whole, finding the leading trends and basic patterns in the system of these relationships.

The systematic approach is connected with the need to study the concepts of "professional development" and "management of the educational environment for the professional development of teachers", which we characterized from the point of view of philosophy, psychology, and pedagogy. In addition, the process of managing the educational environment of professional development of teachers has a clear structure, which includes a number of components, and is characterized as a holistic concept. Therefore, in relation to the investigated problem, the systematic approach provides a comprehensive study of the problem of managing the educational environment of the professional development of teachers at all stages of the research, the organization of purposeful systemic actions aimed at the management process.

On the basis of the above, it can be concluded that the systemic approach provides a holistic view of the problem of managing the educational environment of professional development of teachers and makes it possible to consider it, firstly, as a continuous process of professional development of the teacher; secondly, to ensure the unity and integrity of all components of the management system of the educational environment for the professional development of teachers in the institution of general secondary education, namely: conceptual-target, organizational-management, content-technological and evaluation-resultative; thirdly, we understand the model of management of the educational environment for the professional development of teachers as a system whose effectiveness is tested experimentally.

The system approach is closely related to the person-oriented approach, which is widespread in modern education. According to the person-oriented approach, in the process of managing the educational environment of the professional development of teachers in the institution of general secondary education, the central subject is the person who is the subject of improvement in the context of her professional development through own activities.

Management of the educational environment for the professional development of teachers will be more effective if the individual characteristics, interests and needs of teachers are taken into account in the educational environment. According to the person-oriented approach, the teacher is recognized as the main person in the educational environment, such conditions are created in which he can be in the role of a full participant, a subject of activity. A personally oriented approach involves the creation of appropriate conditions for the self-development of a person's aptitudes, abilities, and creative potential. During professional development, the
structure of professional motives is formed and the individual realizes them, as a result of which the personal meaning of the activity is established, which leads to the transformation of both the activity itself and the motivational sphere of the individual.

We emphasize that the personally-oriented approach is a methodological basis for managing the educational environment for the professional development of teachers in a comprehensive educational institution, in particular, aimed at preparing teachers for professional development, which makes it possible to support and support a system of interrelated concepts, ideas and methods the processes of self-discovery, self-building and self-realization of the individual, the development of his unique individuality, to form the readiness of teachers for professional development.

At the current stage of educational development, a personally oriented approach appears within the limits of the competence approach, concretizes, deepens, and supplements it. The main idea of the competence approach boils down to the fact that the result of education is not separate knowledge, abilities and skills, but competences. According to this approach, the essence of the training of pedagogical personnel is not to enrich the individual with a certain amount of information, but to develop the ability to operate with it, design and model one’s activity, the ability to creatively apply the acquired knowledge and experience in practical activities.

The competence approach is radically different from the traditional "knowledge" approach - in terms of the functions of the one who teaches and the one who learns in this process, the purpose of educational activity and learning outcomes; at the same time, it shares many features with person-oriented and action-oriented approaches. The competency-based approach focuses on educational outcomes; at the same time, the result of education is not the sum of learned information, but the ability of a person to act in various life and professional situations.

According to the competence-based approach to the management of the educational environment, the professional development of teachers in an institution of general secondary education should be focused on the professional training of a competent specialist, in which the formation of professional competence is an important aspect. In this context, the importance of self-education of teachers, their performance of individual research tasks, the use of innovative educational technologies, in particular the method of projects, trainings, role-playing and business games, as well as solving methodical problems and situations, creating a teacher’s portfolio, is effective.

The activity approach to learning is generally accepted in pedagogy and psychology. If the competence approach is focused, first of all, on achieving results, which are competencies, then the vector of the activity approach is aimed at organizing the learning process, which acquires an activity character. Since the mastery of competence is impossible without gaining experience of activity, it can be argued that competences and activity are interconnected and complement each other.

According to this approach, activity is defined as the basis, means and decisive condition for personality development, as a form of active purposeful interaction of a person with the surrounding world. Personality is considered as a subject of activity, which itself is formed in activity and communication with other people and determines the nature of this activity and communication. From the point of view of psychology, the content of education is learned not through the transfer of information to a person, but in the process of his own active, directed activity. The generalized result of professional education should be the teacher’s readiness for social and professional activity, because only through his own active activity a person can develop.

In the context of our research, the activity approach can be defined as the organization of the process of managing the educational environment, in which the teacher acts from the position of an active subject of knowledge, who purposefully develops skills related to professional development, analysis and evaluation of the results of his activity. It is through activity and in the process of activity that the teacher becomes himself, self-actualization of his personality and professional development takes place.

Another new approach to teacher training is the environmental approach. Since at the end of the 20th century there is a need to change the stable, traditional "knowledge" paradigm and transition to a humanistic, personally oriented one, then in the process of reforming the problem of methodological substantiation and methodological support of professional education as a system that allows a specialist to choose and model his own educational trajectory arises. It is the environmental approach that plays a decisive role in this.

In view of the above, we note that the emergence of an environmental approach requires specially organized activity, in particular managerial activity, the effectiveness of which is only conditional on its design. Therefore, there is a need for a purposeful, conscious approach to the study of the strategy of managing the educational environment for the professional development of teachers based on the development of a target program in a secondary school. Management design will make it possible to ensure the transition of the existing state of the teacher’s professional development to a qualitatively new level, to optimize its content, organization and management.

The implementation of the above-mentioned approaches to the management of the educational environment of the professional development of the teacher in a general educational institution is carried out in interaction with the cultural approach. At the same time, culture is understood as a specific way of human activity. Being a
universal characteristic of activity, it, in turn, seems to set a socio-humanistic program and determines the direction of this or that type of activity, its valuable typological features and results.

The professional development of teachers takes place in the space of a certain culture and its mandatory interaction with other cultures, requiring entry into it and mastering it. Therefore, there is undoubtedly a need for a cultural approach, its methodology, appropriate regulation when solving all pedagogical tasks. Its methodology is especially valuable because it determines the main regulations for building the content of education, including the requirements to reflect in it the main achievements of the human mind and human activity, all the wealth of human cultures, their interconnection and interaction. These representations should not be fragmentary, but systemic, complete, necessary and sufficient for the successful entry of the subject of education into the world of culture in all its manifestations - scientific sphere, social production, everyday life, development and self-development (Ziaziun, 2011).

In this connection, O. Kucheriavyi (Kucheriyi, 2015, p. 10) emphasizes that the core of the cultural approach is the professional culture of the individual, the presence of which in a professional is a leading sign of his maturity, his achievement of "acme".

A fundamentally new vision of the world, a new image of the world and man, a new understanding of development processes is introduced by synergetics as a theory or paradigm of self-organization, the science of general self-organizing regularities. From the point of view of the synergistic approach, professional development is considered as an internal ability to form new qualities in oneself, which are necessary for effective functioning in radically new or changed conditions of the educational environment (Kremen, 2006, p. 5).

A synergistic approach, as noted by O. Kucheriavyi (Kucheriyi, 2015, p. 11), aims at the design and implementation of theoretical provisions regarding career growth from the angle of self-organization of this process by the personality of a specialist.

It should be emphasized that synergistic knowledge in general and understanding of nonlinearity in particular open up new directions in the search for ways to control complex systems. According to the researchers, the synergistic approach to management is based on the phenomenon of adaptation. Its meaning consists in adapting the system to functioning in a state of uncertainty. The task of management is to help adaptation, which defines the concept of "adaptive management".

The acmeological approach to managing the educational environment of the teacher's professional development is one of the most important modern approaches, which involves the study of a person as a whole personality. The relevance of the acmeological approach in adult education (from the Greek – peak, flowering season – the highest point, the period of personal flourishing, its highest achievements, when a person shows his maturity in all spheres of life, primarily in professional activity), is determined by the fact that pedagogical acmeology (B. Ananiev) is the science of regularities of higher achievements in the holistic development of a person at each age stage in the process of continuous education (Ohienenko, 2015).

Based on the analysis of scientific literature, researchers consider the acmeological approach as a basic generalized concept of acmeology, which accumulates a set of principles, methods, techniques, means of organization and construction of theoretical and practical activities, which are focused on quality results in adult education, a high level of productivity and professional maturity (Ohienenko, 2015). At the same time, the acmeological approach makes it possible to find out the subjective and objective factors that contribute to reaching the heights of professionalism; the first of these are the level and quality of education acquired by an adult, and the second are his aptitudes, abilities, and competences.

The urgent need for development, the desire for self-development, self-improvement and self-realization are a significant value in themselves. They are an indicator of personal maturity and at the same time a condition for its achievement. Therefore, the application of the acmeological approach in the management of the educational environment will contribute to teachers' awareness of the personal meaning and significance of professional development. Professional development of a teacher, according to the position of scientists, is a process of personality formation, which is focused on the highest professional achievements.

O. Kucheriyi (Kucheriyi, 2015, p. 10) notes in his research that the function of the acmeological approach is to actualize the need to reach the peaks of career growth as a process of personal development to the level of a mature professional.

We emphasize that the application of the acmeological approach in the management of the educational environment for the professional development of teachers in a general educational institution will contribute to their awareness of the need to achieve acme, the formation of pedagogical mastery, professionalism, which are based on professional development.

Leading scientists consider the andragogic approach (according to the theory of andragogic organization of the learning process (J. Dewey, E. Lindemann, M. Knowles, P. Jarvis)) as the most optimal and promising basis for
the education and development of an adult, in particular a teacher, about the need to educate adults with taking
into account their experience and focus on achieving practical goals.

The andragogic approach is a directional process of stimulation, education, training and improvement of an
adult during professional activity, which integrates the acquisition of individual, creative, personally oriented
approaches (Vashchenko, 2005, p. 8).

Taking into account the andragogic approach, the leading role in the organization of education belongs to the
student, that is, he is an active participant, one of the equal subjects of the educational process. The atmosphere
during training is friendly, informal, based on mutual respect, joint work with the support and responsibility of
all participants in educational activities, and creates the necessary conditions for the development and self-
realization of the teacher’s personality. Therefore, the andragogical approach allows us to single out those
functions and methods of managing the educational environment, which to the greatest extent increase the
teacher’s motivation to study, contribute to his professional development, and overcome negative trends in the
educational environment. The quality of a teacher’s professional development is directly dependent on the level
of implementation of the andragogic approach (Nikolenko, 2009, p. 284–287).

The significance of the axiological approach to the management of the educational environment of the
professional development of the teacher lies in the orientation of professional education to the development of
the system of general human and professional values in which determine their attitude to the world, to
their activities, to themselves as a person and a professional.

The central concept in axiology is the concept of values, which is important not only in themselves, but also
how they are reproduced and realized in the culture of the individual (hierarchy of life and professional values,
their influence on the process of development and self-development of the individual). As a basis, we will
consider the authors’ definition of values as specific formations in the structure of individual consciousness,
which are ideal models and guidelines for the activity of individuals and societies.

In our opinion, the axiological approach in managing the educational environment for the professional
development of teachers determines the value orientation and motivation of the teacher’s personality, his
activities and actions, accommodates the internal motivational forces of the teacher’s personality, ensures the
assimilation of knowledge and self-improvement in the professional sphere; reflects the teacher’s value
orientations, a positive attitude towards various types of morally significant activity, the need for self-
actualization, self-affirmation, self-expression, self-development; involves the teacher’s desire for moral self-
improvement, clarification of personal perspectives; covers motivation for professional development, self-
development, self-affirmation, self-realization, organization. Therefore, it is necessary to carry out the process
of managing the educational environment of the professional development of school teachers based on the system
of values.

One of the means of solving the mentioned problem is a technological approach, which is characterized by the
application of the concept of “technology” to the educational field, to pedagogical processes. The essence of the
technological approach in education has been the subject of discussions and scientific disputes for many
centuries, as “any conscientious teacher” tries to find a learning mechanism that would lead to a certain and
guaranteed result. The technological approach appears as a concentrated expression of the achieved level of
development, the implementation of scientific achievements in practice, as an important indicator of high
professionalism of activity.

The development of educational technologies and the desire to objectify the system of evaluating qualitative
concepts allows researchers to highlight a qualitative approach based on measuring and evaluating the
effectiveness of the management process and the individual-personal level of the teacher’s professional
development, taking into account real achievements.

The essence of the qualitative approach is the evaluation of the effectiveness of phenomena and processes
that are not always subject to quantitative evaluation by selecting individual elements of the system. Regarding
the management of the educational environment of the professional development of the teacher, the purpose of
the qualitative approach is to measure the “effectiveness” of the management of the educational environment of
the professional development as a measure of quality. The use of a system of factors and criteria, level scales,
allows, subject to compliance with certain principles, to fairly accurately assess the studied phenomena. We
believe that the qualitative approach is indeed an effective means of assessing the level of management of the
educational environment of the teacher’s professional development due to its objectivity and validity.

Attempts to solve the problem of managing the educational environment of the teacher’s professional
development in the institution of general secondary education at the technological level are also considered from
the point of view of the diagnostic approach. The diagnostic approach involves the study of processes and objects
from the point of view of identifying the norm and deviation from the norm. The purpose of the diagnostic
approach is to make a diagnosis of the researched object based on a developed system of factors and criteria, that
is, to formulate a justified conclusion about the subject of consideration.

The essence of the diagnostic approach to managing the educational environment of the teacher’s professional
development consists in researching and identifying both strengths and difficulties in the
professional activity of the manager and teacher, developing recommendations for further activities. A difficult point in the diagnostic process is the choice of a system of criteria that allow to form a more or less objective idea about the level of management of the educational environment of the teacher's professional development.

The analysis of means of managing the educational environment of the professional development of the teacher in the institution of general secondary education from the standpoint of the diagnostic approach allows us to make a conclusion about the objective nature of these means and the possibility of their wide application in various situations. The use of tools of the diagnostic approach, in our opinion, as in the qualitative approach, to a greater extent performs the functions of evaluation and control, while the diagnostic approach does not include the organization of further work on the application of diagnostic data, for example, planning and adjustment. Therefore, the diagnostic approach is also not exhaustive in the management of the educational environment of the teacher's professional development, although it is widely used at all stages of management precisely as a tool for tracking its dynamics.

Conclusions and prospects for further research. During the analysis of the theoretical literature, we tentatively identified two groups of methodological approaches to the problem of managing the educational environment of the teacher's professional development. The first group is based on content aspects, that is, the process of managing the educational environment of professional development is determined by the content, and the second group is based on instrumental aspects, in which the tool is a tool for achieving management of the educational environment of professional development. The selected approaches determine the theoretical positions of the organization and implementation of the process of managing the educational environment of the teacher's professional development in various subsystems (training of personnel, professional development and methodical work). The mentioned approaches do not contradict each other, but, on the contrary, complement each other, which ensures the choice of the tactics of scientific research, which is related to the development of a system of management of the educational environment for the professional development of teachers in a general educational institution.

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**МЕТОДОЛОГІЧНІ ПІДХОДИ ДО УПРАВЛІННЯ ОСВІТНІМ СЕРЕДОВИЩЕМ ПРОФЕСІЙНОГО РОЗВИТКУ ВЧИТЕЛІВ**

У статті підкреслюється, що методологічною основою будь-якого науково-педагогічного дослідження є категоріальний апарат філософії. Цілком очевидно, що розробка такої фундаментальної проблеми, як забезпечення комплексних умов розвитку професійної діяльності вчителя, неминуче звертается до методологічного потенціалу цієї науки та застосування її евристичних можливостей у контексті дослідження даної проблеми, які ми розглядали в попередніх підрозділах.

Визначено, що науковці робили багато спроб визначити поняття методологічного підходу. Водночас бракує однозначних трактувань, а відповідно й розуміння того, що таке методологічний підхід. Поняття «методологічний підхід» є загальнознавчим у науковому обігу, однак його зміст і місце в системі інших визначень досі залишається невизначеним. Підкреслено, що в науковій літературі з методики педагогіки існують різні погляди на тлумачення поняття «підхід». У статті дається визначення поняття «методологічний підхід».

У статті розглядаються основні методологічні підходи до управління освітнім середовищем професійного розвитку вчителя. Результати дослідження дали змогу використати ті методологічні підходи, які найбільше відповідають процесу управління освітнім середовищем професійного розвитку вчителів у закладі загальної середньої освіти. Серед них – системний, особистісно орієнтований, компетентнісний, діяльнісний, середовищний, культурологічний, синергетичний, акмеологічний, андрогігічний, культурологічний, синергетичний, діагностичний. Названі підходи не суперечать один одному, а, навпаки, узагальнюють один одного, що забезпечує вибір тактики наукового дослідження, яка пов’язана з розробленням системи управління освітнім середовищем професійного розвитку вчителів у закладі загальної середньої освіти.

**Ключові слова:** методологія, підхід, професійний розвиток, вчитель, освітне середовище.

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