PRIVATE INSTITUTION OF HIGHER EDUCATION "KHARKIV INTERNATIONAL MEDICAL UNIVERSITY"

ZHANNA DAVYDOVA

INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS: THEORY AND PRACTICE

Monograph











Kharkiv 2022

PRIVATE INSTITUTION OF HIGHER EDUCATION "KHARKIV INTERNATIONAL MEDICAL UNIVERSITY"

ZHANNA DAVYDOVA

INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS: THEORY AND PRACTICE

MONOGRAPH

Kharkiv, 2022

UDC 37.026:378-054.62:61

D54

Recommended to publishing by Scientific Council of PIHE "Kharkiv International Medical University" (minutes 7 of 29.09.2022)

Reviewers:

Zavhorodnya Tetyana – Doctor of Pedagogical Science, Professor, head of Bohdan Stuparyk department of pedagogy and educational management of Vasyl Stefanyk Prykarpattya National University

Knyazyan Marianna – Doctor of Pedagogical Sciences, full professor of the department of French philology of I.I.Mechnikov Odessa National University

Shyian Denys – Doctor of Medical Science, Professor, professor of the department of Human Anatomy of Kharkiv National Medical University

D54 Davydova Zhanna

Information Competence Formation in International Medical Students: Theory and Practice: monograph / Zhanna Davydova; PIHE "Kharkiv International Medical University". – Kharkiv :, 2022. – 465 p.

The monograph considers the problem of information competence formation in international medical students. The essence, structure and content of information competence is disclosed; specific character of training of international students is discovered. medical The methodological foundations of the problem of information competence formation in international medical students are determined at the general scientific, specifically scientific and technological levels. The didactic system of information competence formation in international medical is theoretically substantinated, its structural units students are characterized.

Recommended for students, researchers, higher education lecturers and also all interested in the problem of international medical students training.

UDC 37.026:378-054.62:61

© Zh.Davydova, 2022

TABLE OF CONTENTS

FOREWORD	6
CHAPTER 1. THEORETICAL FOUNDATIONS OF INFORMATION	
COMPETENCE FORMATION IN INTERNATIONAL MEDICAL	
STUDENTS	
1.1. The genesis of the development of the idea of forming information	
competence in students	10
1.2. Definition of "information competence" in scientific discourse	30
1.3. Component structure and content of information competence of	
university students	60
Literature to chapter 1	79
CHAPTER 2. CONCEPTUAL FOUNDATIONS OF INFORMATION	
COMPETENCE FORMATION IN INTERNATIONAL MEDICAL	
STUDENTS	
2.1. Methodological approaches to the study of the problem of information	
competence formation in international medical students	116
2.1.1 The role of the system-synergistic, culture-based, axiological	
approaches in the study of the problem of information competence	
formation in international medical students	119
2.1.2. Application of competence-oriented, personality and activity-based,	
environment-based approaches as the methodological basis of research	144
2.1.3. The use of hermeneutic and contextual approaches in the study of	
the problem of information competence formation in international medical	
students	168
2.2. The concept of information competence formation in international	
medical students in the educational environment of the university	184

Literature to chapter 2	199
CHAPTER 3. INFORMATION COMPETENCE FORMATION IN	
INTERNATIONAL MEDICAL STUDENTS IN THE EDUCATIONAL	
ENVIRONMENT OF THE UNIVERSITY AS A PEDAGOGICAL	
PROBLEM	
3.1 Specific traits of international students training in a national higher	
school	227
3.2. Modern requirements for training medical students	250
3.3 Specifics of the formation of information competence in international	
medical students in the educational environment of the university	
3.3.1 Essence and composition of the educational environment of the	
university	272
3.3.2 Theoretical issues of information competence formation in	
international medical students in the educational environment of the	
university	287
Literature to chapter 3	308
CHAPTER 4. THEORETICAL SUBSTANTIATION OF THE	
DIDACTIC SYSTEM OF INFORMATION COMPETENCE	
FORMATION IN INTERNATIONAL MEDICAL STUDENTS IN THE	
EDUCATIONAL ENVIRONMENT OF THE UNIVERSITY	
4.1 General characteristics of the didactic system of information	
competence formation in international medical students in the educational	
environment of the university	340
4.2 Characteristics of structural units of the didactic system of formation	
of information competence of international medical students in the	
educational environment of the university	
4.2.1 Predictive and targetive unit	363
4.2.2 Conceptual and methodological unit	370

4.2.3 Theoretical and content-oriented unit	384
4.2.4 The activity-oriented and procedural unit	400
4.2.5 The resultative and evaluation unit	422
Literature to chapter 4	433
CONCLUSIONS	462

FOREWORD

Immense growth of information streams determines the necessity of information competence formation in modern specialists. This issue is extremely important for future medical specialists on whose activity people's life and state of health depends.

The strategic direction of higher education of Ukraine is training international medical students in the educational environment of universities. Ensuring a high level of quality training of specialists for foreign countries in domestic universities is largely determined by the success of the organization of the educational process, sociocultural and informational adaptation of foreign students. The process of organizing the educational process of foreign students of medical specialties is complex and multi-levelled.

The special nature of the doctor's professional activity determines the specifics of the pedagogical process of training specialists in medical specialties. The main specific feature of medical education is the need to interact with patients (real, simulated, virtual), which requires a sufficiently high level of certain professional competencies, knowledge and applied skills. The effectiveness of professional activity depends on the subject's level of cognitive activity when making decisions and requires prior training in the development of information competence.

Therefore, it is important to ensure that specialists of the specified profile master the methods, techniques and technologies for receiving, collecting, processing, analyzing, understanding information, its interpretation and translation.

In current conditions, the development of a didactic system for the formation of information competence of foreign students of higher education in

medical specialties in higher education institutions of Ukraine is of particular relevance.

In light of this, the presented scientific work is a timely response to the urgent requests of modern Ukrainian society.

The presented monograph does not solve all the scientific problems of information competence formation in international students of medical specialties, but it makes it possible to draw the attention of educators to the discussion of one of the most important problems for today and to determine new prospects for conducting further scientific investigations in the outlined direction. Theoretical and practical developments in the scientific work are presented in such a way as to ensure a structured understanding of them and the specification of content guidelines for their wide implementation in the educational process of higher education.

In the first chapter "Theoretical foundations of information competence formation in international medical students" the genesis of the development of the idea of students' information competence formation is presented; the phenomenon of information competence is analyzed within the scientific discourse; determined the component structure and content of students' information competence.

In the second chapter "Conceptual foundations of information competence formation in international students of medical specialties" the methodological basis of the study of the problem presented at the general scientific, specific scientific and technological levels is defined.

In the third chapter "Formation of information competence of international students of medical specialties in the educational environment of university as a pedagogical problem" the conceptual and categorical field of research is defined, the characteristic features of training international students in domestic higher education field are revealed, modern requirements to training international students of medical specialties are analyzed, the specifics of information competence formation in international medical students in the educational environment of university is presented.

In the fourth chapter "Theoretical substantiation of the didactic system of information competence formation in international medical students in the educational environment of university" the didactic system is characterized, its structural blocks are presented.

The monograph is an up-to-date and independent study based on the deep theoretical work of various scientists and the author's scientific work, the results of the analysis of the collected empirical material and the generalization of domestic and foreign experience on the problem of the formation of an information competence of international medical students in the educational environment of university.

The materials of the scientific work can be useful to scientists, lectures of higher schools and other groups of educators who are interested in the problems of training international medical students.

Deep gratitude and appreciation to my scientific consultant professor Natalia Tkachova for guiding through the process of working on the monograph, professor Manu Kapur, professor Jörg Goldhahn for invaluable support and assistance in obtaining priceless experience.

Many thanks to the reviewers of the monograph - professors Tetyana Zavhorodnya, Marianna Knyazyan, Denys Shyian for their valuable and constructive suggestions regarding the content of this monograph.

CHAPTER 1 THEORETICAL FOUNDATIONS OF INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS

1.1 The genesis of the development of the idea of forming information competence in students

For the possibility of a deeper study of the problem of the formation of information competence of students it is advisable to find outline the origins of the emergence and development of this idea.

As stated in the scientific literature, the study by scientists of the question of how the key concepts were used at different times and for a specific scientific exploration is an effective tool for improving the quality of scientific research, and as a result – the successful achievement of the goal. It is important to bear in mind that people's understanding and actual use of different terms differ significantly from their more formal definitions. Therefore, to ensure the effectiveness of the study, scientists are advised to identify, analyze and compare different interpretations of the chosen terms [222; 227; 257; 287].

In particular, the term "information" has been used by people since ancient times. According to the results of scientific research controversial theoretical views of modern scientists on understanding the essence of this term may appear, for example because of scientific interpretations of the definition of "informatics" and its implicit interpretations during everyday use. Therefore, experts believe that when studying information as a definition, it is advisable to analyze the history of its origin and development, and at the same time pay

considerable attention to the formulation of various interpretations of this concept [ibid.].

In particular, Ch. S. Pierce in his writings emphasized that the meaning of any term is determined not only by its past, but even by the future [283]. This idea is supported by a well-known expert in the field of information policy C. Brahman, in whose opinion this policy "consists of laws, regulations and doctrinal positions, as well as other decisions and practices that have a constitutional impact on the whole society, including the creation, processing, flows, access and use of information" [221, p. 3].

As the researcher states, the information policy turned into a separate branch of scientific knowledge only in the last decades of the twentieth century, when there was a transition from an industrial society to an informational one and, in particular, micro- and macroeconomics of information began to develop. And he also emphasizes that any phenomena in modern information policy (and especially the very concept of "information") should be studied not in isolation, but through a historical "lens for ideas and realities that have a long history" [221, p. 1], including those that were previously considered unrelated. By S. Brahman, using such an integrated approach to the study of various phenomena and processes can significantly improve the quality of scientific knowledge, because "making grounded decisions without understanding the long history" [221, p. 5], development of a specific concept is impossible. In the frameworks of stated above the scientist sums up that in order the study various processes related to information in general, it is necessary first of all to correctly define the concept of "information", and for this it is necessary to trace how the essence of information in the understanding of researchers has changed in the history of mankind and its role in the lives of members of society.

It is worth noting that the primary ideas about information as a phenomenon arose in ancient Greece, although this term itself was not yet used in those days. Ideas about the structure of the universe to its holistic

philosophical comprehension and, in particular, laid the foundation of the day in which various mischievous theories of information are later developed. It should also be clarified that with the emergence and development of natural philosophy in ancient Greece, it was possible to identify and look for ways to solve the problems of society and the Universe from the standpoint of a system of primary scientific knowledge and logical thinking [10; 11; 201]. We would like to note that the ancient Greeks intuitively were able to understand some important laws of human existence and the principles of harmony of the existing world, which operate "in the area of the trinity of science, art and religion" [201, p. 22].

Prominent Greek philosopher Socrates argued that human behavior should be based on strong and complete knowledge, because representations are variable in nature, and therefore they cannot become the basis for members of society to make the right life choices or choose optimal behaviors in different situations. According to the thinker, the dominant place among the knowledge of the individual should be occupied by his knowledge of himself, so that he clearly understands what is useful for him, what he can do and cannot do. After all, the knowledge of man forms the basis of his charity [10; 11; 111].

A huge contribution to the development of theory of information was made by the outstanding scientist Aristotle, who was not only an encyclopedically educated person, but also became the founder of many branches of scientific knowledge: physics, biology, logic, sociology, ethics, psychology, etc. It was Aristotle who transformed diverse philosophic knowledge into science as a system of knowledge about nature, society and thinking, and also identified the grounds for its separation from other spheres of human life: art, craft and religion. As Aristotle stated, the main ways of obtaining new knowledge by a person is accumulating life experience, and his ideas concerning inheritance of certain basic properties must be confirmed by relevant evidence [10; 11; 201].

Appreciating the contribution of the ancient Greeks to the development of the concept of scientific information, it should be noted that the conclusions formulated by them were still not subject to strict experimental verification or clear scientific evidence, as is the case in the modern era. The basis for the rationality of their explorations mostly consisted of persuasion, reflection and observation [201, p. 18]. It should also be clarified that the phenomenon of information was determined by the ancient Greeks primarily through $\varepsilon i\delta o \varsigma$ (view, image) and *morphé* (form), which had both subjective and objective meaning [230; 309].

Taking into account the foregoing, Western scientists (R. Capurro, J. Edgar Hoover, Robredo, B. Hirland, et al.) claim that the concept "information" is of ancient Greek origin and at the same time Latin roots. Thus, the monumental dictionary of the Latin language (Thesaurus Linguae Latinae) contains references to the use of the Latin word informātiō (translated as "information, clarification, familiarization, representation, idea of something") from the time of Virgil I (I century BC) to the VIII century AD. As it was found, in ancient literature there were two main contexts of this concept, namely, material (corporaliter) and intangible (incorporaliter). At the same time, the researchers assume that prefix in- could have the meaning of objections (for example, as in the words informis or informitas) [228; 232; 289; 303].

Thus, references to the use of the word "informo" in a biological context can be found in the descriptions of the Roman thinker Varron about how the fetus receives information by the head and spine. Non-material or spiritual context of the concept "information" is concerned with the use of this term in the moral and pedagogical sense, and from the II century AD understanding of this concept was largely influenced by Christian teachings. In addition, the views of many well-known Roman scholars were formed under the explicit influence of ancient Greek philosophy in particular Plato and Aristotle [228; 232; 237].

As it was found out in the research, the Latin authors translated many important old Greek definitions with the term "information" or the same-root words with it, including the following: " $\nu\pi\sigma\tau\nu\pi\omega\sigma\tau\omega/\mu\mu\rho\tau$ " – "project/model" in a moral context; " $\pi\rho\delta\lambda\eta\psi\tau\omega$ " – "assumptions, forebodings, predictions", " ϵ iδo ζ " – "appearance, image; what is visible"; "týpos" – "imprint, sample, type"; "*morphé*" – "form", etc. For example, the establishment of a connection between these words is characteristic of Cicero [228].

Let us clarify that the latter three terms refer to the key concepts of old Greek ontology and epistemology, that is, these concepts are of a higher (worldview) level. At the same time, it should be noted that Roman thinkers used these "high" concepts as a rule, in the applied sense, that is, as terms of a lower level, for example, in the primitive context of describing various phenomena, which were perceived by people with the help of the senses [228; 232].

Thus, Cicero, translating into Latin the words of Epicurus in his work "De natura deorum" ("On the nature of the gods"), the ancient Greek concept of prolepsis (Greek. prolēpsis – pre-embedded in consciousness) presented as informatio rei. As it is known, according to this concept, the representations of gods or things are imprinted in the soul of man before he acquires the corresponding experience, that is, a priori [232; 237].

In his writings "De oratore" and "Orator" ("On the Orator" and "The Orator"), Cicero used this concept in rhetorical context. So, referring to Plato's ideas, the thinker noted that a phenomenon of prolepsis includes both active and aposterandornin (that is, one based on practical experience) the action of the mind of the person himself, which enables him to isolate and analyze an unknown object using "ars memoriae" ("art of memory"), and for better recall by the individual of a similar situation the author suggested that to attempt to

visualize the situation. According to Cicero, such a technique helps a person to reproduce or create new information about the successful solution of an existing problem situation, that is, to find sententiae informatio ("information about the solution") [228; 238; 240].

Cicero's ideas about the possibilities and use of information in biological, as well as in pedagogical and moral contexts are also of interest. In particular, these ideas are presented by the author in the famous speech "Pro Archia" ("For the poet Archius"), aimed at his defense against the unjust accusation that he posed as a citizen of Rome, but in fact allegedly was not. Besides giving objective evidence about the falsity of such an accusation, Cicero in his speech also noted the fact that Archius received a decent education, and the possession of the right information contributes to the fact that a person becomes a highly moral person who is not able to deceive other people [232; 239].

As C. Geren points out, Cicero closely linked the content of the learned information with the level of morality of its carrier itself. Therefore, revealing the pedagogical meaning of information, the thinker categorically opposed the fact that a person of non-noble origin could master oratory by studying various books, that is, without the pedagogical support of a mentor, because it is causes the destruction of old, time-tested ethical values. According to the conclusions of Cicero, such a speaker may not learn these values and not clearly understand his mission as a member of society, but as a result – perceive his own eloquence as an intrinsic value, and not as a means of defending his point of view in public political debates devoted to the problem improvement of social life [254, c. 78, 80, 81].

In the context of the problem raised, research should draw the attention of these one important thought of Cicero. Thus, he perceived rhetoric as a technique that allows the speaker to convince the audience of the rawness of the formulated conclusions and the practical value of his own theory. For this, the thinker used various means and techniques, and the main place among them was

occupied by means that helped to ensure the authority of the proposed concept, that is, to convince the listeners that it is understandable, convenient and effective for the general public [254, p. 62].

For this purpose, Cicero in his works widely used quotes and from the works of famous ancient Greek thinkers, because in those days it was believed that the more diverse and numerous the information sources used, the more authoritative the theory was created. Firstly, the text was created in accordance with stable traditions in the field of science and art, so the reliability of the information provided is time-tested, and, secondly, references to the works of world-famous ancient Greek thinkers (Aristotle, Isocrates, etc.), whose names were widely known to the Roman nobility, confirmed the coherence of their views and views of the author himself. True, sometimes Cicero, like some other Roman thinkers, in order to increase his own authority could on the contrary, enter into an imaginary discussion with famous ancient Greek philosophers [254, p. 62, 67].

It should be noted that Cicero also paid considerable attention to the question of compliance with the existing tradition of the structure of speech or written text, which, as a rule, should include an introduction, the formulation of the main idea, the presentation of convincing arguments in its favor and the refutation of the correctness of opposing points of view, as well as general conclusions. At the same time, the well-known thinker emphasized that the speaker during his speech should think carefully not only about its content, in particular, to select the necessary reliable information, but also the style of presenting this information. In order to be able to achieve the goal of his speech, the speaker was asked to use various techniques: to provide rational evidence, to demonstrate his spiritual strength and to mentor young people, to evoke the expected emotions in the audience: anger, joy, pity, etc. As Cicero argued,only in this case the information presented will be perceived not only on a rational, but also on an emotional level and, and this, in turn, will ensure the possibility

of its better perception, understanding and acceptance by people [254, pp. 70-72, 79].

In the process of scientific research, it is also stated that the concept of "information' was used by Latin thinkers not only in the sense of the act of transmitting knowledge from one person to another, but also in the sense of an action aimed at giving a specific form to a certain material object. For example, Vergilius used this concept in his famous work "Eneida". So, describing the process of forging lightnings by Vulcan and Cyclop for Zeus, the poet used the term informatum [230, p. 128].

Further development of the idea about information as a phenomenon was obtained in the Middle Ages. At the same time, it should be noted that in the conceptual use of information by some of the advanced thinkers of that era, the influence of Greek ontology and epistemology was also traced. Thus, among these thinkers, a special place is occupied by the Christian theologian and philosopher Augustine, whose views were mainly formed under the influence of Christian traditions from one hand, and the ideas of Greek ontology and epistemology from the other. Emphasizing the high authority of this religious figure among the representatives of both Christian branches, it should be noted that Augustine was recognized as blessed within the Orthodox religion, and the Catholic – as a saint.

It should be noted that in the work "De trinitate" ("On the Trinity"), Augustine described man's visual perception of the world as a process of "the formation of sensory perception" (informatio sensus), using for this purpose the well-known Platonic and Aristotelian epistemological metaphors about the imprint (imprimitur) of the ring seal on wax, that is, to remember. The theologian shared the idea that the images and representations of perceived objects are originally stored in the memory of people. Such images do not provide information to the individual and do not affect his intelligentia rationalis

(rational intelligence), because they are associated only with reflection, that is, informatio cogitationis (internal representations) of the person [230, p. 127].

According to R. Capurro, the process described above is closely related to the concept of an information message, since a person's expression of his impression of the form and structure of a certain object can be perceived as a transmission of a certain message. It is worth mentioning the above-mentioned "seal" was noted in the Greek language as daktylios and in Latin digitus. It was in the latter word from which the modern term "digital" appeared much later [ibid.].

It should be noted that in some of his writings Augustine used the term "information" in the pedagogical sense. Thus, in his work "De civitate dei" ("On the city of God") he emphasizes that Christ is the image of God (forma dei), and therefore his deeds teach and educate people (fad eruditionem informationem que nostram). In line with this, Augustine, in the hiis work cited information about the heavens communities (informatio civitatis sanctae) [228; 230].

As noted in scientific thought, the concept of information is also key to the theologian concept of a prominent Italian philosopher and theologian canonized by the Catholic Church as a saint. Thus, being a scholastic theologian and a proponent of Aristotle's philosophy, on the basis of his ideas, Thomas Aquinas developed his own philosophical and theological theory, which is completely consistent with the Catholic faith, because it is the author's commentary on the Bible. As S. Pinkaers stated, "St. Thomas established a remarkable dialogue between Aristotle's philosophy and theology, and the basis of this dialogue was his faith in the crucified Christa" [285, p. 284].

Revealing the essence of Aristotle's hylomorphism, according to which the basic principles of being are form and matter, the Aquinas form translated this concept into Latin as informatio materiae ("design of matter"). Teologis Interpreted this process in line with the Christian metaphysics of creation, and

therefore clearly distinguished between per modum informationis (physical and biological information processes of man, in particular his "information on the body by the soul") and per modum creativeis (deitynn in creativity in activity). Comprehending the difference between the phenomena of informatio and creatio, Thomas Aquinas clarified that the platonic Demirurge (the so-called "pottery god") is the creator of the material world (space), which is perceived by man for by means of the organs of huttia, that is, the activity of this god has the character per informationen, while the Christian god acts as a transcendent and cause, with the creation of things ex nihilo ("out of nothing"), and not all of these things are sensually perceived by the human being [230; 271].

The study also finds useful the findings of Thomas Aquinas that there is no contradiction between science and religion, because they study truths of different orders. Thus, science develops by the power of the human mind, so it enables researchers to comprehend the existing world only at the level of rational theology, while people can join theological wisdom only through belief. It is important to note that in some of his writings Aquinas also uses the concept of information in pedagogical (informatio virtutum as modeling of human virtues) and moral (informatio morum as a process of modeling moral customs) meanings [230; 271].

So, as the analysis of scientific literature shows, in the Middle Ages, thinkers used the concept "information" in different contexts. Thus, according to the ontological tradition of Plato and Aristotle, it was common among thinkers to have a point of view according to which information reflects the forms of matter, and it implies the ontological use of this concept as in the sense of its lower level, that is, "formative matter", and in the sense of the highest level – informatio materiae ("information material"), which was observed, for example, in the heirs of scholasticism [226; 230; 289]. Let us clarify that the widespread interpretation of information as a form in those days was the reason that in many countries the terms "information" and "form" have a close sound.

In the process of scientific research, it was stated that under the information some medieval researchers also understood "action of informing", instruction, supply, transmission of a message (knowledge) to other people. In addition, in the process of scientific research, another third context of the concept of "information" was singled out – pedagogical, the number of supporters of which began to increase from the XIV century. So in 1683 a book "Methodus Informandi in Pedagogiis tam countrylibus quam urbicis" ("Methods of informing in rural and urban pedagogy") saw the world. It proves that the applied bias of information on that day became increasingly important [226; 229; 230; 231; 244; 289].

As it is found out in the study, the time of transition from the Middle Ages to the New Age initially all the contexts of the concept of "information" defined above were saving their meanings. J. Peters argues that during the XVII – XVIII centuries, a number of researchers defined the essence of information through the concept of "form", but they no longer shared the conclusions that the Universe was ordered by forms, that is, the context the process of its formation was shifted "from the definition of matter to the mind" [284, p. 13].

It should be recalled that it was at the time of the transition of mankind to the next milestone in history – the New Age – that the decline of scholastic philosophy was observed primarily as a result of its displacement by empirical science, which began to actively develop. This led to the refusal of researchers to understand information as giving a (material) form of matter, instead, after a certain time, the point of view about understanding this concept as a message to other people began to prevail among them [229; 231].

In particular, this point of view was held by René Descartes, the founder of the philosophy of rationalism as a universal method in knowledge. Key to his theory was the concept of an idea that he perceives as "forms in thought", but not in the sense that ideas are "depicted" (exist) in a certain part of the brain, but in the context that they transform the "mind itself into a transformative part of the brain [243, p. 161].

As J. Peters points out, the teaching of R. Descartes significantly influenced the further development of the rationalist and empirical philosophy of the New Age. Unlike the scholasticists who wrote about "direct contemplation", that is, the possibility of direct interaction between the human mind and nature, R. Descartes inserted another link in the middle of this chain – an idea that was a certain image, copy, imprint of objects of the existing world [284, p. 13].

A certain contribution to the development of information theory was made by other well-known researchers (F. Bacon, J. Lock, D. Yumm, T. Reed etc.) For example, F. Bacon in the work The Great Recovery of Sciences concluded that no sensory information can be immediately perceived as correct, because this fact requires verification [215, 216]. As stated by R. Capurro, views of F. Bacon only partially correspond to the conclusions of modern scientists, but his main merit is that he moved the center of information "from the world as a whole to the human mind and feelings" [230, p. 130]. Based on the study of the scientific views of scientists of the New Age R. Capurro made the general conclusion that in that day there was a loss in everyday speech of the objective meaning of information, which was associated with the addition of a substance form of matter, and the preservation of the subjective aspect of information that occurred by transmitting a message to other people [ibid.].

As noted by scientists (A. Vriken, J. Peters etc), certain changes in information theory occurred in the nineteenth century, which is associated with the expansion and acceleration of the development of the socio-economic system and the change in the role of information in the management of it. It was at that time that the "place of information" became not an individual person, but the state, and the information itself started to be correlated with the knowledge used to exercise state control [284; 307].

Fundamental changes in the theory of information that occurred in the middle of the twentieth century are associated with the publication in 1948 of the article "Mathematical Theory of Communication" [294], in which the results of the study of C. E. Shannon on the disclosure of everyday semantic and pragmatic aspects of the definition of information were published. In particular, C. E. Shannon argued that the sender transmits to the recipient not the information, but the message; the author interpreted the information itself as a potential choice of different messages, as a removed uncertainty. It is thanks to this scientist that the world saw a fundamentally new concept of information, which still retains its value.

As stated by B. Kusherets, K. E. Shannon was the first among scientists to determine that information is a characteristic of not just a certain abstract message, but its relationship with a specific recipient based on taking into account even the source of the signal and the addressee [102, p. 43]. Due to this information "expands the observer's understanding of the goal and ways to achieve it "[295, p. 45].

As it is known, in recent decades, information has become the main strategic resource for the transformation of society. At the same time it is stated in the scientific literature that discussion on the modern concept of information, that started from the second half of XX century in connection with emerging and active development of innovative technologies, caused the growth of interest of specialists to objective assessment of studies in the field of information theory for the past stages of human history [230; 284; 307]. In this ackground, the above analysis of the history of information allowed us to better understand the essence of this phenomenon and its significance on the modern stage of development of society.

Obviously, the rapid updating of information, including in the professional field, required the replacement of the traditional "knowledge" paradigm of education, which has already exhausted its capabilities, with a more

modern model, among which, in the conditions of the information society, information competence occupies a prominent place. Taking into account the complexity and multidimensionality of this personal phenomenon, in order to be able to adequately determine the essence of information competence, it was concluded that it is advisable to trace the history of the emergence and development of this concept.

As it was found out, by the time of the emergence of the concept "competence" and, in particular, "information competence", the entire previous period of the history of human society can be perceived as a preparatory stage, at which a number of prerequisites arose that determined the possibilities for updating the problem of information competence in the future. So, some specialists state that in Ancient China the need of this competence formation was realized 3000 thousand years ago, because instead of taking into account the recommendations of the authorities during the selection of students for public positions, a written exam was introduced for them [259; 313].

The idea of the need for the formation of this competence in a veiled handicap was contained in the writings of many ancient Greek thinkers who emphasized that the practical activity of man is the foundation of his harmonious existence in society. So Democritus noted that personal wisdom is manifested in the following abilities: "to think well, to speak well, and to act well" [113, p. 163].

Democritus was the first scientist who, in his materialistic teaching of 1531, expressed the idea that for a full life a person must think well, speak well and do good deeds. This idea can be correlated with the definition of competence that is presented in scientific literature [216, c. 672].

According to Socrates, knowledge is a person's idea of a certain subject. In turn, the comprehension of this knowledge is his action to achieve the set partial goal. The general result of all the actions of the individual is the development of his mind, which ensures the formation of new concepts [16; 56; 141].

The need to develop competence was also stated by Plato, whose philosophical views covered all spheres of human activity, in particular education. Thus, according to the conclusions of the philosopher, in order to master a certain activity, a person must master the corresponding qualities [141; 142].

Some scientists believe that the conceptually competent paradigm of education originates from the ideas of Aristotle, who used the concept of "atere" (translated into Latin as "virtu"). Under this concept, the outstanding ancient Greek thinker understood the power that, in the process of its development and perfection, reached such a degree of formation that it turned into a characteristic feature (property) of the personality [275].

So, we can summarize the fact that in ancient times great importance was attached to the influence of the soul on the activity of the body. In light of this, the primary ideas about the formation of competence were based on thoughts about the need to improve personal qualities (soul), intellectual abilities (mind) of a person and the process of his practical activity (acts).

In the Middle Ages, when apprenticeships in artisans spread, apprentices were required to master the necessary practical skills and abilities in a particular field, to achieve the expected level of professional skills in accordance with existing standards. This approach to vocational training is to some extent close to competence-oriented learning [260; 313].

Important prerequisites for the formulation in the future of the problem of the formation of information competence of young people arose in the times of industrial revolutions, when there were significant changes in all areas of society: production, agriculture, transport, etc. The complication of various types of professional activity required that applicants for different jobs master the predetermined skills and abilities necessary to perform their professional duties [ibid.].

As it was found out, the epoch of the Enlightenment left behind many valuable scientific ideas that greatly influenced the formation of a future competence-oriented approach. Jean-Jeaque Rousseau presents the positive influence of the experience of human interaction with things on its development and upbringing, mastering vital skills [159; 199].

In the context of the problem raised, G. Pestalocci's ideas aroused considerable interest. He in his works defended the idea of the need to combine the training of young people with the organization of their socially useful practical activity. According to the conclusions of a well-known teacher, work not only contributes to the formation of a person and as a person, but also encourages to evaluate other people by their actions, and not by empty words that are not supported by real actions [139, p. 132].

G. Spencer's conclusions about the role of social ties and the influence of social knowledge on the professional qualities of the individual were also useful for our study. Adaptability ensures that a member of society masters the norms of morality, as well as vital knowledge and skills. Noting the general inhumane orientation of the theory of the named scientist, which caused criticism of his ideas from many scientists, we consider it necessary to note that some of his views can be interpreted through the prism of the need to ensure competitiveness of each specialist in a market economy, and this is an important point for justifying in the future the importance of the formation of vital competencies among members of society, among which information competence occupies a prominent place [255; 297; 298].

According to scientists (Y. Wilcox, V. Neumann, E. Taxworth, T. Hoffman, etc.) during the First World War, a new model of education arose in the field of teacher training, based on the concept of competence, although this term itself has not yet been used. This was due to the need to ensure that

24

teachers are ready to train qualified artisans and technicians so that they can become instructors for inexperienced military personnel [258; 278; 306].

We would like to note that at the beginning of the twentieth century the idea of competence and, in particular, information competence was further developed in connection with the development of scientific management.

In turn, C. Allen, adopting the ideas of the well-known specialist in the field of management F. W. Taylor about improving the efficiency of activities, introduced these ideas into the field of vocational education. So, he argued that first it is necessary to analyze a certain profession in the light of listing everything that a student must learn in order to become a professional in this matter, and only then, on the basis of this, to organize his professional education. For example, if we are talking about the profession of a carpenter, the instructor must first write out all the types of work that a carpenter must perform, and only then begin training a future specialist [214, p. 43].

As defined in the study, the development of the idea of competence in the 30s of the XXth century (especially in the USA) was closely associated with changes in the organization of work of employees, namely, the foundations in its effective organization began to be sought in identifying the specifics of professional activity and introducing the concept of qualifications in order to systematize the areas of employment. In particular, it was the emergence of the concept of qualification that gave impetus to the study of the concept of competence, intensified scientific research on improving the efficiency of professional activity and determining the criteria by which employees should be chosen [282; 310].

Based on the analysis of scientific literature, it was found out that from mid-twentieth century the question of the effectiveness of professional work of people has become the subject of study by many scientists [252; 253; 313]. However, as it is stated in the study, the very concept of "competence" was introduced into scientific circulation in 1959 by R. White in his work

25

"Motivation reconsidered: the concept of competence" the author used this concept to characterize the properties of a person that allow him to perform a quality work and show developed motivation in this work. According to the conclusions of R. White, the high efficiency and motivation of such an employee are ensured not only by his knowledge, but also by the formed self-awareness, effective self-regulation and developed social skills [311].

In 1965 N. Chomsky, referring to the works of V. Humboldt, applied the concept of "competence" to the theory of language, denoting it as "the ability necessary to perform a certain, predominantly linguistic activity in his native language" [234, p. 103]. As you can see, this researcher used this concept in the context of psycholinguistic research. Later, the term "competence" began to be used in other scientific fields.

In 1978, the U.S. government published uniform guidelines for the employee selection procedure, which stated that such selection should be based on taking into account the professional qualifications of employees, analyzing their business behavior, and desired performance. In 1994, the National Skill Standards Board (NSSB) was adopted in the United States. These standards stipulate what employees of a certain profile must know and be able to do in order to successfully perform work-related functions in the industry sector. In addition, the standards determined the work to be performed, the requirements for its quality, as well as the level of necessary professional knowledge and skills [251; 260; 277; 313]. It is important to note that the employee's compliance with the put forward standards provided for his information competence, the desire to constantly improve his level of professionalism through self-education.

Note that the gradual introduction of the concept of competence in all spheres of society not only contributed to the modernization of various sectors of industry and business in terms of the effectiveness of professional activities of employees, but also led to the emergence of a new model of competence-

oriented education, which was closely related to industrial and business models and met modern requirements for the training of its applicants [258; 306].

At the end of the 60s of the twentieth century awareness of the necessity of implementing a new model of pedagogical education and, based on the idea of competence, led to the implementation of curricula reforms. At the same time in 1968 the US Department of Education funded ten studies on the development of model curricula for the training of primary school teachers based on the implementation of a competency-based approach. Later, the teacher accreditation system was introduced into practice, where minimum standards of productivity and the minimum required level of competence of teachers were determined [258; 262; 306].

In turn, the successful reform of teachers and teacher education on the basis of a competency-based approach has intensified similar processes in other levels of vocational education, in particular, the modernization of the system of training doctors, nurses and assistants. It is worth noting that procedures of certification and licensing for many professions started to include complex tests that assess the knowledge of the applicants, directly related to his certain professional competencies [306; 313].

The study found that in the late 70s of the twentieth century in the U.S.A. the main reason for taking an employee to work was the results of his intelligence testing. As an alternative option D. A. McClelland proposed a competency-based approach, which was based on an analysis of the actual success of specialists. Subsequently, these researchers developed a test to determine the expected effectiveness of a specialist, where using a criterion sample determined the entire internal state of a person (his motives, moods, value orientations) and specific actions that can ensure the success of the activity. So, in this way, the researcher tried to show that the employee has exactly those qualities, properties that are necessary for the implementation of

professional activity and often do not depend on the level of intelligence of the individual [272, p.117].

In 1973 D. A. McClelland published an article in which he expressed the following opinion: instead of using tests to diagnose the abilities to identify potentially successful employees, it is advisable to identify people in whom appropriate business qualities are formed: prudence, ability to see problems and in a timely manner took measures to eliminate them, the ability to set and achieve complex goals.

Works of D. McClelland intensified the conduct of many studies, the authors of which tried to find out what behavior traits and characteristics of a person ensure the effectiveness of his activities, to find objective grounds for the appearance of potentially good, medium or bad workers, and this before the definition of specific differentiators that could help specialists evaluate and hire the best employees, as well as help them improve their productivity. Over time, stable traits and other characteristics of a person that ensure his effectiveness in the activities of a certain type began to be called "competencies".

An important step in the development of the idea of competence was the separation at the symposium in Bern in 1996 under the Council of Europe's program of so-called "key competencies" as the most universal in nature and degree of application. Information competence was identified as one of the key competencies, which contributed to the introduction of this definition into scientific circulation [261]. It is also important to note that in 1997, representatives of the Organization for Economic Cooperation and Development (OECD) in the program "Definition and choice of competencies: theoretical and conceptual foundations" (DeSeCo) clearly identified three groups of key competencies "necessary for people to be successful and responsible life" [291, p. 18]: autonomous activity, interactive use of means, ability to function in socially heterogeneous groups [131, p. 11].

According to experts, the main advantage of the competence-based paradigm of education is that it allows not only to single out the composition of the specialist's business behavior, but also to clearly indicate what key and professional competencies an employee must master to ensure the effectiveness of his professional activity [236; 299]. One of the competencies that specialists of any profile must master is information competence [161; 245; 261].

It is also important to note that in 2008 UNESCO presented the following document: "Modules of standards of competences" (standards of ICT competencies for teachers), which further actualized the problem of forming information competence of students [242].

So, it can be summed up that for many centuries advanced thinkers formulated valuable ideas that formed solid prerequisites for the development of a modern competence paradigm of education. The story of the development of the concept of information competence is closely connected with the shifts in the development of information, and information and computer systems and the formation of the above educational paradigm.

1.2 Definition of "information competence" in scientific discourse

For the correct definition of the concept of "information competence", we consider it appropriate to first reveal the essence of such key research concepts as "competence" and "information". Based on the analysis of scientific literature, it was found that these concepts are widely used in modern scientific literature, but scientists interpret them ambiguously. It is important to note that some researchers in their various works have proposed different definitions of these concepts.

Thus, in the process of study, several basic approaches of scientists regarding the interpretation of the category "competence" were identified. In particular, supporters of the first isolated approach define this concept as the

ability of a person to carry out activities of a certain type in the information environment. For example, among the supporters of this approach can be named some foreign scientists (I. Baker, J. Britell, B. Chopin), who understand competence as the ability of a person to apply skills and knowledge obtained in practice, and later, on the contrary, to show this ability in the process of continuous learning [217; 223].

L. Semko argues that the competence of the individual is the ability of the individual to use the acquired knowledge and skills in everyday life or other activities [163, p. 437]. Similar opinions are expressed by M. Akbaeva, D. Demeshkant, O. Merzlikin, S. Seitenova and Sh. Mukhangaliyev, who define a certain category as the ability of a person to effectively perform a specific type of activity by an individual [58; 119; 166; 265].

G. Polyakova, O. Torichny argue that competence is the ability of an individual to take active actions related to the effective use of theoretical knowledge in practice, successful implementation of tasks, meeting social and personal needs [146; 188].

The above thoughts are consonant with the conclusions of I. Rodygin, who interprets competence as the ability of the subject to perform a certain type of activity on the basis of knowledge, skills, values, abilities [157, p. 17]. According to I. Bondar, competence is manifested through the ability of the individual to perform actions due to the personal interest of the subject in a certain type of activity [25, p. 8].

According to I. Zyazyun, this concept should be interpreted as the ability of a person to successfully solve problems of a certain class on the basis of previously acquired knowledge and skills [76, p. 14]. T. Koknova interprets competence as an integrated ability of a person to effectively implement activities on the basis of acquired knowledge and skills and their operation in the process of its implementation [90, p. 173]. Such scientists as P. Borisov, S. Vitvitskaya, O. Dobrotvor, E. Seer, N. Nychkalo, M. Ryzhakov, S. Shishov, L. Stefan and others also determine competence as the ability of an individual to appropriate activity. [27; 33; 62; 73; 160; 206; 208].

Close to the above-mentioned scientific approach by definition of the essence of competence is the second scientific approach, whose representatives understand this concept as a person's readiness to carry out activities in a certain area. So L. Kazarina, A. Lytvyn, O. Lytvyn consider that competence is a readiness of a person to fulfillment of a chosen kind of an activity [37; 80; 105].

Another point of view is expressed by N. Kobzar, arguing that competence and readiness are close in meaning concepts, but they cannot be considered equivalents, because they have not only similar, but also distinctive characteristics. motivation, and competence is based primarily on the accumulated experience of a person, that is, readiness serves as the basis for the formation of competence [86].

According to the third scientific approach, scientists understand by competence an integrated set of components (knowledge, skills, attitudes etc.) necessary for the successful implementation of a certain type of activity. M. Goncharenko defines competence as a combination of knowledge and skills that a person needs for the objective implementation of a certain type of activity and in general for successful life in society [153, p. 149].

O. Pometun considers competence as a set of structured knowledge, skills and attitudes acquired by a person during training, allowing to effectively implement activities [148, p. 18]. This category will necessarily cover the personal attitude of a person to them, as well as the practical experience accumulated by him, which makes it possible to correctly assess the existing situation. thus activating the development of a person's appropriate competence [129; 147].

As stated in the study, I. Kubenko interprets competence as a complex of knowledge and personality traits that allow one to carry out a certain type of activity effectively [99, p. 7-8]. According to the conclusions of S. Vitvitskaya,

competence is a set of knowledge and skills that form the basis for the implementation of activities [34, p. 221].

According to A. Khutorsky, competence is a system of knowledge, values and ideas that manifest themselves during activity [196, p. 62]. Close ideas are expressed by D. Luchaninov, who understands by competence the integration of knowledge, skills and experience that enable a person to implement relevant activities [269]. V. Balyuk interprets the competence as a complex system of specific knowledge, skills and abilities of a person, necessary for her to effectively implement the tasks at a high level of quality [12, p. 32].

Similar views are held by O. Antonov, I. Babin, Y. Bolubash, A. Harmash, T. Golovanov, L. Maslak, N. Murovana, who note that competence is a relationship of theoretical knowledge, practical skills, personal qualities that ensure a person's ability to effectively perform a certain type of activity [3; 6; 41; 125].

Supporters of the fourth scientific position on understanding the essence of competence understand by this concept a high level of experience, education, and awareness of a person in a particular field. I. Zymnya notes that competence can be defined as the result of the assimilation of social and professional experience in an individual, based on acquired knowledge and absorbed through the prism of intellectual and personal development [74, 75].

In some of his studies R. Vdovychenko, V. Melnyk and P. Shcherban stated that the competence of a person is interpreted as a high awareness and education in a certain area [31; 118; 209]. V. Machusky and V. Moshtuk interpret competence as a perfect mastery of certain knowledge by a person and their creative use in problem situations; mastering a certain business; an indicator of the education of the individual as the expected result of the educational process [116; 123].

O. Beznosyuk and I. Bekh understand the competence of an individual's experience in a particular field of activity, which ensures his ability to mobilize

his own strengths and capabilities for the successful implementation of ideas in a particular area of activity based on his intellectual and moral self-regulation in the process of fulfilling the tasks. The authors emphasize that experience is not equival to awareness of man in a particular area [27; 160].

According to the conclusions of the representatives of the fifth approach, competence is a certain integrated formation, as a quality, traits in a person, ensuring the success of his activity. So, T. Golovanov understands this concept as a personal trait that integrates the acquired knowledge necessary for carrying out activities in an innovative mode, into the mindset, skills, personal inclinations, value orientations of the subject, which, in turn, ensure the deepening of his own experience [41, p. 39].

A. Tkachev defines competence as a personal education that integrates theoretical knowledge into the skills, habits, motives, qualities and personal values, ensuring the ability of a person to fulfill the planned activities [185, p. 141]. According to A. Markov, the above-mentioned personal phenomenon manifests itself as a form of psychological, personal and quality in a person that enables him to act independently and effectively perform certain labor functions [110, p. 31].

O. Shestopalyuk understands by competence the integral quality of the individual, which is the result of his mastery of a set of theoretical knowledge, practical skills and abilities, qualities and provides a focus on expedient active actions in the process of performing the tasks [205, p. 5]. O. Chala defines competence as an integral personal characteristic of an interdisciplinary nature, which is the result of a person's mastery of knowledge and skills and ensures his readiness for productive activity [198, p. 11]. According to Y. Gnatenko, competence is a dynamic integrative neoplasm of the personality, which ensures its ability to work effectively in the conditions of modern society [40, p. 16].

As defined in the study, O. Plakhotnyk and O. Beznosyuk under competence understand the integrated characteristic of personality traits, which

ensures the successful implementation of activities in a particular area and is determined by the required level and amount of knowledge and experience in performing this activity [143, p. 205]. V. Svistun and V. Yagupov also perceive competence as a complex integral, intellectual, personal formation, manifested, developed and improved in the process of carrying out activities [212, p. 7]. In this approach, O. Baranovskaya, I. Grishina, O. Ovcharuk, O. Pometun, S. Sysoeva are also observed in some of their scientific works, as well as they define competence as an integrative personal quality based on the integration of knowledge, skills, motivation, personal qualities and predetermines the ability of the individual to exercise duality [13; 51; 131; 148; 171].

In accordance with the sixth approach, competence is the mastery of a person's relevant competencies. N. Bilyk also believes that competence is the result of the individual's mastery of the relevant competencies, which in particular implies the development of his personal properties and value attitude to the subject of activity [21, p. 52].

A similar definition of competence is proposed by A. Lavrov, understanding by this concept the mastery of a person's relevant competence, which in particular implies the manifestation by a person of a value attitude to him and the subject of activity [103]. M. Volikova also perceives competence as the acquisition of certain competencies by a person, representing an element of his readiness to perform the formulated tasks and including certain elements of the characteristics of his personality [35, p. 41]. I. Piankovskaya also shares these views. [136, p. 206]. V. Kalinin believes that competence characterizes the level of professionalism of the individual, which is acquired through mastering the necessary competencies in the form of knowledge, skills and abilities [81, p. 6-7].

The above points are consonant with the ideas of L. Primachok, who defines this concept as the possession of an individual of this competence, including his personal value attitude to himself as a subject of his own activity

and its subject [151, p. 41]. In his dissertation work, A. Tkachev argues that competence is the result of an individual's mastery of a certain competence, which in particular is manifested in the presence of a high level of formation of knowledge, skills, qualities and experience in the implementation of certain activities, the manifestation of the ability to perform tasks in new conditions [187, p. 18].

The definition of the category "competency" through the concept of competence requires clarification of the essence of this concept. As noted in the scientific literature, for some time the above two terms were often used by Ukrainian scientists as synonyms, which was largely explained by their correspondence to the only English equivalent of "competency(e)", which translates as "skill, ability, legitimacy", as well as inaccuracy of translation. Only at the beginning of the XXI century in the scientific literature of different countries concepts started to distinguish among them [20; 44; 81; 126; 276; 281; 300].

According to the conclusions of modern Ukrainian scientists (S. Bondar, O. Y. Lazor, O. D. Lazor, O. Obolensky, O. Ovcharuk, O. Slipushko, I. Sokolova, V. Yaremenko, etc.), competency is: the range of powers of a person granted by law; formally describes the requirements for the formation of knowledge, personal (or professional) qualities of a person, the experience gained by him in a certain area of activity; the range of issues in which a person must be well aware; universal methods of activity, invariant for a certain number of professions and specialties aimed at solving certain professional and labor tasks; socially determine the level of knowledge, skills, abilities and values in a particular field of activity; the projected identity or ability of an individual to perform a certain type of activity [26; 60; 92; 104; 130; 176]. A. Khutorsky defines competency as a set of personality traits that meet the requirements of society for high-quality and productive life [195, pp. 59-60].
In the context of the study, the conclusions of scientists on comparing the meaning of the concepts of "competence" and "competency" were also useful. Thus, M. Golovan clarifies that the essence of a certain area of activity is reflected in the competence, and competency determines the ability of the individual to competently perform certain activities [44, p. 226].

According to the views of M. Glynska, competency is a predetermined requirement for knowledge, skills and abilities that are necessary for effective activity in a given field.

S. Voronov believes that competency is manifested through the definition of techniques and means appropriate for solving a problem or achieving a goal by a person, and competence reflects his ability to solve problems and problems in a certain area in non-standard situations based on his own experience [36, p. 166]. Y. Poskripko and O. Danchenko note that the formation of a competency occurs on the basis of existing competencies and as a result of practical experience in their use, however, this process is successful only under favorable circumstances and working conditions, the presence of a highly professional mentor, the presence of mutual support in the team [150, p. 119-120].

O. Kuchai clarifies that competency should be perceived as a predetermined sphere in which a person has a certain set of knowledge, skills, and abilities for carrying out competent activities. In turn, competence is a personal achievement of the individual, thanks to which it becomes possible to correctly use his knowledge and skills to solve the problem in a non-typical situation [100, p. 44-45].

According to the conclusions of A. Tkachev competency is a predetermined standard, formally described knowledge, skills, qualities of a person, ensuring the successful implementation of a certain activity by a person in typical and atypical situations. In this regard, competence determines the field of activity, as well as the normatively defined functions and responsibilities of the performer of this activity. The author understands the competence as a result

36

of obtaining the competency. So, a competence, being of a subjective character, is manifested in real life as the ability of a person to perform a certain activity effectively, that is, to successfully achieve the planned results [185, 187].

Based on the foregoing, it was concluded that competency is an objectively given category, reflecting a set of formally defined knowledge, skills, qualities of a person, the assimilation of which is a necessary prerequisite for the successful implementation of a certain activity; In contrast to the competency, competence has a subjective character, it reflects the result of a person's mastery of competency (competencies) that ensure his ability to successfully implement this activity in standard and non-standard situations.

In the context of the study, we consider it appropriate to clearly define the main differences between competence and a set of relevant acquired knowledge and skills. Thus, S. Goncharenko explains that in the process of training the student acquires certain knowledge and skills necessary for effective activity in certain areas. So competence is the ability of an individual to use practically these knowledge and skills in non-standard situations. And for this it is necessary not only to master the relevant knowledge and skills, but also to gain experience in their practical use for solving problems in various situations. A person accumulates experience not only during the implementation of certain activities, but also during interaction with the environment and through non-formal education [46, p. 176].

Similar ideas are expressed by S. Shishov and V. Kalney, who emphasize that knowledge and skills are acquired by the individual in the learning process, and the result of mastering competence is the general ability of a person to apply the acquired knowledge, skills and experience to solve problems arising during the implementation of certain activities [207, p. 134-135].

A. Khutorsky defines knowledge, skills and habits as different levels of mastery of information. In turn, the researcher perceives competence as the ability of a person to use a set of acquired knowledge, skills, habits, abilities, for

the competent implementation of certain activities and the solution of nonstandard tasks [194].

Similar views are held by M. Yavorivska, who notes that knowledge, skills and habits are the result of training, they form the basis for the formation of competence. In turn, competence is the result of the accumulation by a person of the relevant knowledge based on the use of this knowledge, skills, habits and abilities. [211, p.143].

To reveal the essence of the concept of "information competence", it is also important to clarify the interpretation of the concept of "information". In particular, this concept comes from the Latin word informatio, which means clarification, presentation, familiarization, explanation. In modern reference literature, information is defined as: data on the environment and the processes occurring in it; information about the state of something; a set of presen information and messages that are formed in society, distributed by its members and used in various spheres of life [78; 133; 190].

The Law of Ukraine "On Information" notes that information is "any information and / or data that can be stored on tangible media or displayed in electronic form" [152]. A similar definition of this concept is also given in the Civil Code of Ukraine [197]. For example, it can be information about certain social, state and natural phenomena, events and processes.

It should be noted that in modern information society, information is one of the most valuable resources of mankind, the main factor in the active transformation of society, and therefore it is an important object for studying specialists in various scientific fields. The points of view of some scientists regarding the interpretation of the concept of "information" are presented in Table 1.1.

Table 1.1

Examples of scientists' definition of the concept of "information"

Definition of "information"	Author, source
1	2
All objective facts or assumptions that affect a person's perception of the present and the degree of uncertainties associated with the chosen problem; everything (facts, forecasts, estimates, etc.), which potentially makes it possible to reduce the degree of uncertainty; result of getting rid of the uncertainty or the result of choosing from existing alternatives; communication, in the process of which the existing uncertainty is eliminated; quantity of uncertainty in the meaningful message received by the person	R. D. Basel, R. W. Brown, D. F. Cox, A. Mol, C. Shannon [7; 121; 293]
Intangible good, arising from the performance by the individual of intellectual and creative activity, the influence on him of other objects and subjects; documented information about various phenomena and processes occurring within society, the state, the environment, etc.	O. Kokhanovska [96]
Part of the knowledge of mankind used by members of society in the process of daily or professional activities	V. Afanasiev [5]
A message that contains information about the status of a particular process or object	B. Grushin, L. Fedotova, E. Tarshis [112]
Information and data transfer about any cases that were not known to the person in advance	S. Anisimova [1]
Mental abstraction; with a specific substance that does not belong either to the material category or energy; an intangible object created by the human mind; designation of the content that the individual receives from the outside world	N. Wiener [32; 312]
Data that have been received, organized and passed on to other people	M. Porat, M. Rubin [286]

Continuation of table 1.1

1	2
The right environment, material to acquire or create new knowledge	F. Mahloup [270]
Form of knowledge in the form of symbols, signs and numbers	A. Yettsioni [250]
Knowledge, data, information obtained from the external environment and accumulated during the implementation of various activities that can be used by people for their own benefit	V. Ponomarenko, I. Gontareva [149]
New information that is disseminated from subject to subject during information relations and makes sense to people	V. Rechytskyy [156]
Characteristics of the surrounding world that arises during its cognition and reflects the objects, phenomena, facts and processes present in it	I. Bachilo [15]
Any message that allows people to reduce the amount of unknown knowledge about a particular object, phenomenon or process	E. Matminas [114, c. 67]
Any Information that can be gleaned from the existing signal and added to the existing knowledge of people; all information that is the object of storage, analysis, broadcasting and transformation by people	A. Kozlovsyka, J. Sapir [89; 165]
Knowledge that can be transmitted without losing integrity; form of knowledge	B. Kohut, W. Zander [264]
A specific product of human activity from which you can gain knowledge	F. Drecke [244]
The flow of messages from which new knowledge is created on the basis of the subjective opinions and beliefs of its owner existing in a person	I. Nonaka, H. Takeuchi [280]
Data, ideas, knowledge that are directly involved in the communicative process of people	O. Shevchenko [203]

End of table 1.1

1	2
Accumulation of data of an informational nature, which is presented both in printed or electronic form in a certain period of time and which we need to create / obtain knowledge and use it in various types of activities	M. Borovik [29]
Specially processed and coded knowledge that does not provide certainty in achieving the goal; not just new knowledge, but the results of changes and knowledge, the expansion of the subject's ideas about a certain problem and ways to solve it; specific vector quantity, that in the process of achieving the goal is directed to changes in the existing representations of man	V. Kusherets [102, p. 44]

Based on the analysis of various definitions of the concept of "information", it was found out that scientists, as a rule, associate it with the concept of "knowledge", and some researchers do not see a fundamental difference between them.

Thus, V. Kusherets notes that knowledge is the result of an adequate reflection in the human mind of various phenomena and processes. According to the author, information is only new knowledge, that is, knowledge that has a certain novelty, usefulness in the context of achieving the goal of the activity [102, p. 44].

According to the views of V. Kushertz, the essence of information can also be defined as "knowledge for other people", because it is alienated from one person as its primary carrier (author, generator) and becomes a message to other members of society. In particular, knowledge is an example of information presented in various printed sources (books and documents etc.), oral radio or television reports, Internet news, etc. [102, pp. 28, 45-46].

Based on the analysis of various scientific sources, other differences were also identified between the above concepts. Thus, information is new or refined

data about a certain phenomenon, which is systematically presented in a certain context, can be understood and reproduced by other people, easily transmitted to other members of society. Any information reflects a combination of certain data and relevant content.

In turn, knowledge is objective, useful information learned by a person, which was obtained as a result of accumulation by a person of a certain experience. The availability of the necessary reliable knowledge is not only mandatory, but also sufficient prerequisites for the implementation of the forecasting procedure in the relevant field of activity.

Based on the study of scientific literature N. Kalyuzhna also found the main difference between knowledge and information: knowledge is constructive in nature, acting as the basis for successful human action, while information may not include knowledge. At the same time it is worth noting that it serves as a mandatory environment for creating new knowledge by a person [82, p. 110].

As F. Yermirzoeva and E. Panteleev emphasize, knowledge is always "personal, reasonable, systemic, objective, indisputable, reliable, intersubjective" [68, p. 112; 138, p. 53]. Unlike knowledge, any information belongs to a group of people at once, it is "chaotic, public, objectively subjective, devoid of the characteristic of truth, publicly available".

As V. Palitsyn emphasizes, information is data about the object under study, which enters the brain of an individual and in the process of thinking is compared and adapted to the knowledge he has learned earlier. In turn, human knowledge represents a set of concepts in the form of ideas, theories, methods, concepts that were learned in the educational process and are used by him in solving theoretical and practical problems [137, p. 47, 48].

At the same time, the author emphasizes that information and knowledge are not only closely related to each other, but can also pass from one to another under certain conditions. Thus, information in the process of thinking and due to memory and imagination of a person can be transformed into his knowledge.

In one of the scientific sources the following conclusions are formulated:

1. Information is obtained from various sources and organized data about a particular object. Knowledge reflects awareness of a person in the result of obtaining education or accumulating experience;

2. Information as a concretized form of data is important for a person to understand its meaning. Knowledge is acquired objective information that gives an opportunity for a person to make correct conclusions;

3. Information is created by data, collected in a certain significant context. Information together with a person's experience and intuition becomes the basis for knowledge formation.

4. Information processing helps to improve its presentation to people, and provides easy interpretation. Knowledge processing promotes a person's consciousness and as a result improves knowledge on the chosen object.

5. Information provides a person's understanding of the data and facts presented. In contrast, the assimilation of knowledge contributes to understanding by the person of a certain subject.

6. The transfer of information is a simple procedure carried out through various means (verbal and non-verbal). "Transmitting" knowledge of the recipient is not a simple process, it requires the implementation of a learning process in which the person must be an active subject.

7. Reproduction of information is low in price. However, similar reproduction of knowledge is impossible, because this process is based on a person's experience, the formation of his individual values, the organization of his perception of relevant educational material, etc.

8. The presence and information is not enough for the possibility of carrying out procedures for generalizing or predicting something. Availability of the necessary knowledge is a sufficient prerequisite for the ability of a person to anticipate the further course of a certain process or to make conclusions.

9. Not every information becomes knowledge, but any knowledge is processed by information [274].

So, we can summarize that the information is certain data about a particular object. It is of a social nature and is accepted and transmitted from one member of society to another. Unlike information, it is impossible to transfer knowledge to another person in a ready-made form, because it is the subjective quality of a particular person and is formed in the process of active understanding of the perceived information.

The research also studied the main characteristics of the information. In particular, V. Sitarov identified the following properties of information:

1. can be used simultaneously by many consumers;

2. its volume does not depend on the number of consumers, that is, it does not decrease in the process of consumption;

3. can be quickly and easily broadcasted to considerable distances;

- 4. created through the use of universal means;
- 5. able to meet any of the needs of people;

production and consumption of information is a single process [172, p. 37].

It is also worth noting that V. Boyer and A. Paveleva identified such important characteristics of information as the object of study: 1) the absence of substantial independence; 2) availability of characteristic as a set of properties of the information received, which must meet the existing needs of the user; 3) selectivity; 4) continuity in the process of development; 5) moral (but non-physical) aging in time; 6) mass-orientation (information quickly becomes accessible to all and spreads to a large array of consumers); 7) inequivalence (inconsistency) of qualitative and quantitative assessment of the information provided; 8) the value of information, as a rule, practically does not depend on the spendings on its receipt and preservation; 9) ability for transformation, that

is, the independence of the content of information from the method of its transmittance and the form of fixation; 10) ability to be limit; 11) the universality of information, that is, its content can be presented in various forms; 12) inexhaustibility; 13) consistency of information; 14) the ideality of its nature [23, pp. 6–8].

As it was found out in the process of scientific research, scientists, based on taking into account their own positions on the interpretation of the essence of competence and information, proposed different definitions of the concept of "information competence". So, some of them understand information competence as a certain appropriate ability, person. This approach of scientists is reflected in Table 1.2.

Table 1.2

Information competence as the of a person to correctly use modern computer technologies

Definition of the essence of the concept of information competence	Author, source
1	2
The ability of a person of effective use of computer technology	R. Gurevich [55]
The ability of a person to use information technology to access information in order to meet social requirements and individual needs	K. Sinenko [174]
The ability of a competent use of information technology by an individual in various types of his own activities	J. Krumsvik [265]
The ability of competent use by the subject of information technology, understanding and critical evaluation of information content	S. Scott [292]

Continuation of table 1.2

1	2
The ability of a person to effectively use information and technology to ensure their own and social requirements for mastering the necessary knowledge, skills and habits	O. Spirin [178]
Competent use of information technology by a person in everyday life, study or professional activity	O. Mironova [120]
Ability of a person to use computer technology and related software to access and process information	O. Semenikhina [167]
Possession by the subject of computer equipment, the possibility of its effective use in professional activities and everyday life	N. Balovsyak [9]
Human ability to create electronic information, search, analysis and systematization of the received materials and data	O. Semenikhina [167]

Supporters of the second approach perceive information competence as a person's readiness for a certain type of activity. Examples of such interpretations of this concept are presented in Table. 1.3.

Table 1.3

Information competence as the readiness of an individual to carry out a certain type of activity

Definition of the essence of the concept of information competence	Author, source
1	2
The readiness of a person to competently use information, in particular in digital format, based on the assimilation of relevant knowledge, skills, norms of behavior in the modern information environment,	R. Gurevich [54]

Continuation of table 1.3

1	2
mastering information literacy, knowledge of information security	
The readiness of the individual to the realization of knowledge, in the skills and abilities of the search and transformation of information from various fields for the competent performance of social and professional functions	L. Petukhova [140]
The readiness of the individual for the competent use of modern information technologies in solving problems of professional and daily activities	M. Golovan [42]
Readiness of a person to perform professional activities in the conditions of information and educational environment.	A. Lytvyn, O. Lytvyn [105]
Willingness of a person to master skills and abilities from the field of information technology	T. Lupinis [107]

Representatives of the third approach interpret information competence as an integrated set of certain components.

Table 1.4

Information competence as an integrated set of components that

ensures the ability of a person to effectively act in the conditions of the

information society

Definition of the essence of the concept of information competence	Author, source
1	2
The totality of knowledge, skills and attitudes of a person that he needs for the effective use of information and computer systems	B. Youssef, M. Dugman [210]

Continuation of table 1.4

1	2
A set of knowledge and skills that allow an	J. Romani [241]
individual to navigate in the information space and	
operate with information according to their own	
needs, labor market requirements and professional	
efficiency	
Knowledge and skills of the individual, which	E. Polat [144]
allow him to quickly access the information	
necessary to study and solve a specific problem, the	
implementation in general and the formulation of	
reasoned conclusions.	
A set of knowledge about the basics of	M. Golovan [42]
information technology, computer skills	
A set of people's skills needed to work with	L. Shevchuk [204]
Information technology, computer literacy	A G [1 (0]
Skills and habits of a person in computer	A. Semenov [168]
operation, the ability to competently operate	
Information and information objects	
Skills, habits and experience of a person, which	D. Luchaninov [269]
allow him to realize the possibilities of information	
technology in everyday and professional activities in	
Interconnection of knowledge skills and	N. Murovono [125]
Interconnection of knowledge, skills and	N. Murovana [125]
the individual for a certain activity	
Knowledge skills abilities inclinations and	T. Colovanova [41]
crientations of a person he needs to enrich his own	1. 0010valiova [41]
experience activate personal development	
competent implementation of innovative activities	
Knowledge and skills of the individual in the field	L Kisla [85]
of computer science and information technology	1. M 51 <i>a</i> [05]
The system of knowledge of a person on	L. Didukh [61]
information objects and the ability to use them in	L. Diddkii [01]
activities by means of information technology	
attitudes to cognitive activity to the processes of	
social environment, to oneself	
The totality of knowledge and skills of a person to	P. Caravello.
provide access and to extract the necessary	J. Hershman.
information, to evaluate it critically	E. Mitchell [233]
The set of skills of the individual to work	N. Gendina.
competently with information, to make decisions in	A. Semenov [37; 169]

Continuation of table 1.4

1	2
unpredictable situations	
A set of skills for the search and selection of necessary information, competently work with different types of material, classify and summarize the data obtained	O. Bisova [19]
The totality of human needs in obtaining knowledge, skills and abilities of possession of computer and technical information means, technical and natural knowledge of the modern information society, skills of the individual to carry out an independent search for information, analyze, store and transmit certain data and information about the real object by means of information technologies	L. Semko [163]

Supporters of the fourth approach understand information competence as awareness, awareness of a person in the information field. Examples of their interpretations of the concept are given in Table 1.5.

Table 1.5

Information competence as the awareness of a person in the information

Definition of the essence of the concept of Author, source information competence 2 1 Experience of a person in working with L. Shevchuk [204] information Understanding patterns and features of the O. Goncharova [47] of information processes in a implementation particular activity, experience in the field of systematization of the data obtained, finding optimal solutions to the tasks with the help of information and communication technologies

sphere

Continuation of table 1.5

1	2
Information, authority, experience of a person in the field of working with information	V. Shevchenko [202]
High level of mastery and competent use of information by a person in the process of activity	O. Ivanova [77]
High awareness in the world of information	K. Sinenko [173]

According to the supporters of the fifth approach, information competence is a certain personal formation (integrated quality) of a person.

Table 1.6

Information competence as a complex personal formation,

Definition of the essence of the concept of information competence	Author, source
1	2
Complex personal formation that characterizes the individual as a representative of the information society	V. Bespalov [18]
Personal formation based on the integration of theoretical knowledge and practical skills of a person	O. Zaitseva [71]
Personal formation that systematically combines a set of necessary knowledge and skills of a person in the field of information technology and the experience of their competent use	O. Ionova [79]

integrated quality

According to the conclusions of the representatives of the sixth approach, information competence is the result of a person's mastery of the relevant competencies.

Table 1.7

Information competence as a result of mastering a person's

relevant competencies

Definition of the essence of the concept of information competence	Author, source
1	2
Human possession of a set of competencies that are associated with the search, analysis and processing of information	O. Kucheruk [101]
The result of a person's mastery of the totality of competencies (computer, communicative, media competence, competence of critical perception and analysis), which are associated with the search and analysis of information in printed form	J. Karlinska [83]
The result of mastering the relevant competencies (information search-oriented, information-analytical, information-technological, information-technical, information-editorial, information-thematic, information-legal competences)	O. Matsyuk, R. Tarasenko [115; 182]
Mastering personal and public competencies in the application of information technologies	Y. Pashkevich [155]
Mastering a set of competencies that ensures successful work with information in its various forms, various information technologies for the successful implementation of various activities	N. Balovsyak, O. Kravtsov [8; 9; 97]
The result of mastering general information and special competencies, determined by the profile and content of the professional activity of a specialist and ensuring the solution of professional problems by means of modern computer technology	O. Boytsova [24]
Personal formation based on the ability of a person to apply relevant knowledge, skills and abilities to solve problem situations using information technology	A. Zavyalov [70]

Continuation of table 1.7

1	2
Personality quality in transformation of information into specific knowledge to make optimal decisions	O. Baranovska [14]
The quality of the individual associated with the search, analysis and processing of information	J. Karlinska [84]
Personality quality, which makes it possible to use information technology to access media resources	V. Bykova, O. Ovcharuk [191]
The integrated quality of the subject, who is aware of his role in society, has the ability to use information technologies, is able to solve tasks in activities and realize himself in work	E. Sofinska [177]
Certain psychological and personal qualities that allow a person to perform professional functions	A. Markova [110]
Physical and intellectual properties that allow a person to take make decisions independently and to be responsible for them, to solve life problem and situations effectively	I. Grishina [51]
Integrative formation of personality, which is manifested through the ability to search, analyze and store information by means of modern scientific and computer technologies	O. Fentsik [189]
Dynamic personal formation that combines knowledge, skills and abilities to use information technologies in educational or professional environment	A. Bochevar [30]
System personal trait which combines the theoretical and practical ability of a person to use ICT in the process of activity	A. Drokina [65]

It is also worth noting that N. Muranova and N. Fedorova in their scientific work compared knowledge, skills, abilities with the information competence of a person performed by the individual automatically. As the

authors noted, in contrast to the knowledge that exists in the form of information about activity, human information competence is manifested in the form of practical or mental activity. Unlike skill, this competence is improved as a result of conscious activity. Unlike the skills used automatically, information competence is a conscious form of activity [124, pp. 59-60].

So, we can summarize that scientists interpret the concept of "information competence" ambiguously. This is primarily due to the complexity and multidimensionality of the phenomenon under study. In the context of the problem raised, it is also necessary to determine the main functions of information competence as a personal phenomenon.

The analysis of scientific literature (O. Borysyuk, M. Golovan, A. Tkachev) demonstrated that one of the main functions of information competence is a motivational function, which ensures the activation of the process of the development in a person of the motives for carrying out certain activities and encourages active actions, forms the desire of the individual for self-affirmation and self-realization in various activities. This function includes two aspects: goal setting (determines the motivating content of consciousness, reflecting the expected activity performed) and content formation (provides control over compliance with the general orientation of this activity). The gnoseological (cognitive) function of this phenomenon activates the intellectual activity of the individual, directs him to the knowledge of the surrounding world and self-knowledge based on the processing of new information, the assimilation of knowledge and its systematization, the growth of the level of education, the expansion of horizons [28; 42; 185]. The gnostic (research) *function* of this competence activates the individual's desire to carry out search activities based on the use of various types and forms of scientific information sources.

According to the conclusions of scientists (O. Borysyuk, A. Drokina, A. Tkachev, etc.), *the axiological and orientational function* of information

competence ensures the orientation of a person in the existing world in general and in interaction with other people, formation of the value attitude of the individual to the objects of existing reality and to himself, his own knowledge and activities, and also contributes to the formation of personal values individual. The evaluative (informative) function of this phenomenon ensures the formation and manifestation by a person of the ability to navigate in the flow of information, select the necessary information based on filtering the information received, focus on the selected data and assess its significance in the context of the tasks. The developmental function of this competence involves the creation of favorable conditions for the development of individual abilities and properties of a person, the most complete disclosure of his personal potential. The communicative function of information competence predetermines the competent organization and implementation of the communicative process between people or a person with a computer system based on the use of traditional and electronic storage media, the manifestation by participants of openness to communication [28; 66; 185].

As the researchers emphasize (O. Borysyuk, V. Limar'yov, A. Tkachev, etc.), among the main functions of information competence, the main place is also occupied by the following:

– emotional-volitional (contributes to the development of a person's ability to manifest volitional qualities, mobilize their efforts to overcome various obstacles in the process of implementing activities);

– adaptive (ensures the successful adaptation of the individual to life in a rapidly changing information society, the adaptation of a person to the conditions of a particular activity);

normative (determines the set of legal requirements and moral norms of the life of the individual in society);

54

– organizational (allows a person to successfully regulate the behavior and activities of its other participants, influence their beliefs and attitudes, coordinate the actions of members of group interaction);

- *diagnostic and correctional* (reflects the ability of a person to analyze the causal relationships between phenomena and processes in a certain field of activity, provides an in-depth understanding of its essence and criteria for evaluating the results obtained, making the necessary adjustments to actions;

prognostic (expressed in the ability of a person, based on the analysis of available information, to correctly predict the results of activities, the consequences of various phenomena and processes and determine the optimal methods of action in predicted situations);

– operational and activity-oriented (reflects the ability of a person to successfully apply the acquired knowledge in practice, to effectively solve the tasks in standard and non-standard working conditions).

The highlighted functions of information competence mainly determine the structure and content of this personal phenomenon. It is also worth noting, that in the scientific literature, along with the specified concept, scientists today actively use many other terms that are close to it in meaning. The definition of some of these terms is given in Table 1.8.

Table 1.8

Examples of the definition of termines, which are closely correlated with the concept of "information competence"

Terms	Their interpretation	Author, source
1	2	3
Information culture	Specific social mechanism for transmitting meaningful information; a culture of handling knowledge, data and information that focuses on different media	M. Antonchenko V. Rostov, A. Stepanenko [4; 158; 179]

Continuation of table 1.8

1	2	3
Information literacy	A set of norms and rules of behavior in society that are associated with information exchange; knowledge systems that allow a person to freely navigate the information flow	N. Demchenko L. Konoshevsky, Y. Stetska [59; 95]
Computer literacy	General knowledge related to information technology, work with computers, the possibilities of their use to perform certain tasks; awareness of the basics of certain hardware and software	N. Balovsyak [9]
Information competence	A set of knowledge, skills, abilities and beliefs that provide the individual with productive life- activity in an information society; ability to work with a computer and apply information technology	I. Smirnova, O. Goncharova, L. Shevchuk [47; 175; 204]
Computer literacy	Knowledge and skills of a person in the field of computer science, the ability to competently use computer technology;	A. Drokina, N. Morse, Y. Mashbits, M. Smulson [65; 122; 135]
Information and analytical competence	The ability and willingness of a person to use the existing knowledge, skills, personal qualities in working with information of various types and forms of presentation (traditional or electronic), to carry out its analytical and synthetic processing to produce new knowledge in order to effectively perform various activities.	L. Humenna, N. Lobach [52; 106]
Search and information	Ability to implement search and information activities based on the	S. Kharitska [192]

Continuation of table 1.8

	2	3
competence	use of the latest technologies by mastering the skills of working with vocabulary and reference literature, analyzing and using the information received, finding solutions in non- standard situations	
Information and communicative competence	Confirmed ability to confidently, critically use the means of information and communication technologies to meet their needs and perform socially significant tasks, the ability to develop computer presentations, use graphic editors, process information in on- line libraries	V. Balyuk, M. Dagmani, O. Spirin, O. Fentsik, Y. Ben [12; 189; 218]
Digital competence	A set of knowledge and skills in working with ICT and digital technologies (various types of electronic equipment and applications in which information is presented in the form of a numerical code)	R. Krumswick, O. Ovcharuk [132; 265; 266]
Digital literacy	Ability to work on the basis of the use of resources and tools responsible for the selection and evaluation of information obtained through media resources	E. Ademon [213]
Information and digital competence	Specific and critical use of ICT by a person for searching, creating, processing, exchanging information in private communication, in society, at work; information and media literacy; skills in compliance with internet safety standards; mastering the rules of ethics for working with information (copy-	Y. Zaporozhtseva, [72]

End of table 1.8

1	2	3
	right, intellectual property, etc.)	
Information and technological competence	An integrative personal formation, which characterizes the mature personality of a person in the modern information society and provides the necessary level in obtaining, processing, transmitting, integrating and presenting certain information using the latest information technologies	P. Bespalov [17]
Technological literacy	Awareness of a person in the basic concepts of technologies and their use in practice	P. S. Carvello, E. G. Bora, J. Hershman, E. Mitchell [233]

In the process of research it is stated that the range of definitions by different scientists of the above concepts is rather wide, which does not allow to unambiguously identify how they correlate with the concept of "information competence". However, the above material has become a powerful theoretical foundation, on the basis of which the author's definition of this concept was formulated.

Thus, in the study, information competence is understood as a personal formation that provides a person's ability to quickly navigate in a modern information flow and competently work with information provided in different languages and in various forms to solve tasks. We believe that the definition of the chosen phenomenon is universal, that is, it applies to all members of society (including university students), without taking into account age, life experience, professional orientation and other individual qualities of people. However these characteristics of the members of society should be taken into account when

specifying the content of information competence for different segments of the population.

1.3 Component structure and content of information competence of university students

The study of the problem of the formation of information competence of applicants for higher education implies a clear clarification of the composition and content of this competence.

Thus, back in 1999, the Society of Colleges, National and University Libraries of Great Britain (SCONUL) published its model of information competence called the "Seven Pillars of Information Competence". This model has been widely used in the United Kingdom and around the world [263]. However, in 2011, the SCONUL Working Group on Information Literacy updated and expanded the model to more clearly reflect the range of different terms and concepts that are now understood as information literacy. According to SCONUL, information competent specialists demonstrate awareness on collecting, using, managing, synthesizing and creating information and data based on compliance with moral standards, and most importantly, have the appropriate information skills to perform all these operations effectively [220; 235; 308].

In other words, this new model identifies key knowledge, skills, and attitudes that are the objectives of developing the information competence of higher education applicants, with each of these components being referred to as a "pillar" by SCONUL representatives. According to experts, within each "pillar" a researcher throughout his scientific life can develop from the level of "beginner" to "expert", however, since the world of information itself is constantly changing and developing, a person as a specialist can not only progress, but also regress over time. Therefore, the totality of the above pillars

of the mind is as a circle, a spiral, and not as a sequence, because people in their activities can reach different levels of complexity of the tasks performed within each isolated pillar. According to SCONUL conclusions, seven above-mentioned pillars prove that a specialist has such knowledge, skills, habits formed:

- to determine their own actual needs for information;

- to assess their current knowledge and identify gaps in it in the context of the tasks set;

- to develop individual strategies to find information and the right data;

to determine the location of the information and access it and the data you need;

 to study the course and results of the research process, compare and evaluate current information and data;

- to competently work with information based on compliance with moral standards and academic integrity requirements;

- to create new knowledge based on the synthesis of old and recently obtained information,

- to apply the knowledge gained in practice, present the results of their research, disseminate them in various ways [ibid.].

It should be noted that a number of scientists (M. B. Eisenberg, N. P. Thomas, R. E. Berkovetal, L. King, C. A. Lowe, C. L. Spandtzer, etc.), determining their point of view on the outlined problem, recall that at the end of the last century, information and technological competence (literacy) was determined as the "key competence" ("basic skill") of the twentieth century. At the same time, back in 1991, the SCANS report ("Secretary's Commission on Achieving Necessary Skills") to the US Department of Labor determined that all employees should have information competence at least at the initial level,

and this, in turn, should provide for employees to have the following abilities: to receive information and use it in practice. However, the intensive development of computer technology has led to a situation where some experts began to perceive information competence as a synonym for computer literacy, although in fact it is not its content equivalent. As a result, there were a lot of people who have computer skills, but had significant problems in working with information (in particular, in identifying current problems in various sectors of society, searching, comparing, synthesizing information from various sources about this and problems, applying this information in practice, etc.). The need to rethink the content of the information competence of a member of modern society has emerged, it could ensure the implementation of a qualitative leap in education from computer to information skills of its students. In this case organization of their computer work is to ensure their mastery not by isolated technological skills, but by a holistic integrated approach to working with information based on the use of various sources, a prominent place among which is occupied by information technology [247; 248; 249; 263; 304].

As a response to the actual needs of society, on the basis of taking into account the well-known taxonomy of B. Bloom [219] M. V. Eisenberg and R. E. Berkowitz, back in 1991, developed the author's model of information competence – the so-called "Big six skills model" (sometimes scientists designate this model as Big 6), which still retains considerable popularity not only in the United States, but also in other countries [247; 248]. In particular, K. Bruce believes that the structure of this model can be described as systematic human information behavior [224].

Let us clarify that this model is essentially a reflection of the six-stage strategy for the formation of information competence of applicants for education, which requires them to implement six mandatory stages (steps):

1. A clear definition of the task in terms of information, that is, what needs to be done, what information to collect before embarking on an

61

information retrieval strategy. It is about finding out the essence of the task by the subject of training, as well as expectations about the type, volume and quality of information activity before choosing an individual strategy for finding information. Obviously, the more clearly students identify a problem and understand its essence, the more effectively they can move towards solving it.

2. Selection for the identified information problem of a specific strategy for finding information and resources, which requires the applicant to decide which sources of information (human resources, information resources, etc.) are the most suitable (optimal) for solving this problem. At the same time, when determining their own strategy for finding information, students must take into account various criteria (accuracy, reliability, ease of use, accessibility, clarity, etc.) to choose from sources of information.

3. Search (finding out the location) of relevant information resources and gaining access to them as an implementation of a specific strategy for finding information, which requires a person to show skills in using various means of access (bibliographic databases, printed indexes, etc.) to attach to information placed in libraries (printed books) or searching for the necessary sources of information in the online catalog. As the authors of the model clarify, a person's ability to work with a library catalog is significantly different from the skills that he needs to search for sources of information, for example, in OVID or SilverPlatter databases, because this involves the use of a different mechanism and Search. Therefore, the teacher should focus on ensuring that students master not the specific skills necessary to work with relevant databases, but a general approach to solving information problems, knowledge of general characteristics of all databases, because in this case a person is able to easily transfer his skills to new information situations, because most of these databases allow you to search for the author and combine this operation with the recognition of the subject headings.

4. Processing information after finding it, which requires the student to show relevant skills and abilities, in particular the following: working on information by reading the text, viewing in its most important fragments, taking notes reflecting the main ideas and finding out their correlation with certain tasks; interacting (conducting a dialogue, listening to their communication partners, asking them questions and analyzing answers); understanding the information received, etc.

5. Synthesis of various blocks of processed information for independent decision-making in the light of the implementation of the task. Thus, at this stage, the student is required to master the skills of restructuring and reformatting information into a new or another form, its use in various activities: creating a project, writing an article, holding a performance, organizing an exhibition, etc. information, etc. At the same time, it is the synthesis that transforms the information found by a person into his knowledge.

6. Evaluation of the effectiveness and effectiveness of their own information activities, that is, verification and evaluation of the process of solving information problems, on which the effectiveness of this activity largely depends. After all, it is this assessment by the applicant that determines to what extent the information found corresponds to the task; whether it was possible to solve the outlined information problem; whether there was an information need, etc., therefore, the implementation of the assessment procedure involves the reflection by students of the process of solving the information problem. In this case, it is assumed that if they receive negative answers to these questions, the specified process is reapproved. It should also be noted that the implementation by the subjects of training of the self-assessment procedure helps them to better understand their strengths and weaknesses, and as a result – to cover their own process of solving information problems in the future [247; 248; 263].

As M. V. Eisenberg clarifies in his other scientific work of a later period, Big6 is not just a set of information skills that reflects the essence of the

63

presented model of information competence and the proposed approach to solving information problems, but also an effective technology for organizing "metacognition" of the subject, which enables him to be aware of his mental states and processes, and this in turn helps students learn to solve the problems. This technology is constituted of six consequent stages:

1. Definition of the problem (determination of information problems and the necessary information for its solution).

2. Strategies for finding information (identifying possible sources of information, about the best of them).

3. Allocation and access (search for the sources and the necessary information in them).

4. Obtaining information (joining various activities (reading text, listening to messages, etc.) to obtain the necessary information).

5. Synthesis (ordering information from several sources; creation of new information).

6. Evaluation (evaluate the results in the activity, that is, its effectiveness; evaluate the very course of the process, that is, the effectiveness of the activity performed) [246].

As it turned out, the theoretical and practical value of the presented model of information competence Big6 is noted in many scientific works [224; 263; 304; 315]. In particular, analyzing the model described above, N. Thomas believes that the proposed approach to information competence as a "big six skills" allows its authors to associate the cognitive levels of a person with different stages of its implementation into information process by determining: person's needs (level of knowledge); correlation of resources with aspects of the problem (complex level); selection of channels and sources (applied level); definition of the main elements in information sources and links between them (level of analysis); implementation by the individual of restructuring and transmissions and information (level of synthesis); making value judgments by

the individual regarding the information received on the basis of the influence of his specific needs and tasks (level of assessment). So, the significance of the "model and the big six skills" developed by M. V. Eisenberg and R. E. Berkowitz, reflecting the composition of the information competence of a person, is primarily due to the attempts of these scientists to isolate and explain the processes through which the subject of training must pass, to achieve a high level of formation of the specified competence [247; 304].

According to T. Brush, S. E. Wolfs and J. W. Say, the most convincing conclusion of M. V. Eisenberg and R. E. Berkowitz, formulated by them on the basis of an analysis of the results of the study, is to identify a potential connection between Big6, chosen by the applicant specifically, the strategy for solving a certain information problem and its metacognitive skills necessary for a person to perform educational activities of a problem nature and the cognitive framework, which supports the participants of the educational processes during problem solving" [315].

Another point of view regarding the composition of the subject's information competence is held by J. Lau, who defined it as the integration of the following abilities: recognize their own information needs; find the necessary information and assess its quality; store and receive information; effectively and ethically use information and apply information to create and transmit new knowledge [268].

As it is stated, Ukrainian scientists also pay considerable attention to determining the structure and content of information competence of students. Thus, V. Bukov and Y. Zhuk to the composition of human information competence include his knowledge, skills and attitudes necessary for the effective use of information technologies for the collection, analysis, evaluation, systematization and synthesis of the necessary information [225, p. 65-66].

65

R. Tarasenko and S. Amelina are of the opinion that the information competence of the individual consists primarily of the following components: knowledge, skills and abilities to work with information, readiness for the effective implementation of professional activities in the conditions of the modern information society, motivation to increase their own level of use of information technologies in professional activities. the composition of human information competence researchers also included: the skills of using a computer, the ability to turn information into professional knowledge, the ability to set goals when searching for information and its subsequent transformation. These scientists also determined that a specialist with a high level of information competence is able to navigate well in the flow of information, work with various information sources, successfully meet his own information needs, competently use information technology hardware and use information technology in their own professional and daily activities [183].

According to the conclusions of A. Chmil and M. Zagorny, information competence of a specialist consists of his ability to use information and computer technologies to search, create, accumulate, store and disseminate information [200]. O. Anishchenko and O. Padalka believe that the main components of the structure of human information competence are the following abilities: use information technologies, effectively interact and use information both in electronic and printed forms, quickly find the necessary information and quickly process it [2].

A. Samko defines the information competence of the future specialist as a set of five components that accordingly ensure: his successful interaction with the information society; professional development of a person; demonstrating the skills to correctly analyze and use digital resources; the ability to learn subordinates; the ability to constantly increase the level of formation of information competence both at home and in other employees [162].

A. Gritsenko argues that a person's information competence consists of a set of skills that ensure his ability to successfully work with various sources of information, use reference literature and the Internet to search for the necessary information, correctly interpret the content of information sources, in particular those indicated in them, events, phenomena and facts [49]. O. Drogaitsev considers the content of information competence as a system of skills of a specialist to effectively use new information technologies, methods and means on the one hand and the ability to carry out analytical and synthetic processing of information, use search engines, solve operational ones to search for the necessary information technologies on the other hand [64].

As determined, some scientists in their writings described the structure and content of the future specialist's information competence in more detail. M. Golovan defines the structure of an information competence as the integration of motivational, cognitive, activity-oriented, value-reflexive and emotional-volitional components that are closely interrelated with each other [42].

The motivational component characterizes the attitude of a specialist to information activity in the form of creative information processing, interest in information activity and personal motives that affect goal-setting during this activity. Cognitive component includes theoretical knowledge (awareness of the content and process of a modern information society activity, knowledge on implementation of search cognitive activity, information about information technologies and their capabilities, etc.) and practical skills (ability to acquire the obtained data, formalization, generalization, comparison and combination of new information, development of options and forecasting the consequences of their use, organization with becoming new information) in the information industry. The digital component includes experience in practical activities in standard and non-standard situations that require a creative approach; use in the

work of its hardware and software at a level sufficient for the effective implementation of professional activities. The author also emphasizes that this component is based on general methods of intellectual activity in the form of analysis, synthesis, comparison and generalization, on specific knowledge of working with data [ibid.].

A similar position is held by A. Lytvyn and O. Lytvyn, who note that the structure of information competence of a specialist consists of the following five components: motivational, cognitive, activity-oriented, value-reflexive, emotional-volitional. The motivational component is realized in the aspiration of a personality for obtaining knowledge In the spheres of computer and information and communication technologies, increasing the level of computer proficiency for use in all its information capabilities and its own level of professional activity through the use of information technology [105].

According to the authors, the cognitive component consists of theoretical knowledge and practical skills. The practical skills of this component combine the ability to analyze and use information resources to solve professional tasks, in the ability to search, transform and use the necessary data. skills: to carry out their own activities in accordance with the established sample, to make effective creative decisions when solving problem situations, to use information technologies at the level of an experienced user, to build communications using information technology, to navigate in the information environment [ibid.].

The value-reflexive component ensures the specialist with socially significant personal aspirations and beliefs, value attitudes to the information sphere and its products, adequate self-esteem of his own knowledge and capabilities in the field of information technology, his own position on their use. This component is also manifested in the desire of the individual to constantly improve their own professional level and improve knowledge in the information sphere, the ability to use information and technology to search for relevant information, and finding strong and weak pages of their own information

68

experience. Emotional-volitional component provides the ability of a specialist to understand his own emotional state, to restrain negative emotions in the absence of a result or failures in professional activity, manifestation of perseverance in mastering new knowledge and skills in the information spheresand, principle and initiative during the implementation of professional activities [ibid.].

A similar scientific position on the structure of information competence is demonstrated in the writings by N. Balovsyak who presented information competence as a combination of motivational, value-reflexive, emotionalvolitional and heuristic components. Thus, the motivation component characterizes the personal attitude of a specialist to professional activity, the level of interest in improving the effectiveness of his own professional activity, a creative approach to the performance of professional activities and the presence of social activity. Value-reflexive component grants adequate assessment of their own level of information experience, opportunities for using information technologies for the effective implementation of professional activities [9].

The emotional-volitional component is manifested in the demonstration by a person of perseverance, the effectiveness of implementation and nonformal activity by regulating their own emotions and emotional stress. In addition, the presence of this component implies that the professional is capable of maintaining its own activity and energy, organization in all mental functions during the occurrence of non-standard situations. Heuristic component is connected with successful fulfillment by a specialist of his own professional activity under the conditions of non-full information or not having a clear sample of the task [ibid.].

As it was found out in the study, the position of scientists is widespread in the scientific literature, according to which the information competence of future specialists includes three such components: informational, technological

and procedural-activity-oriented. Thus, the information component provides the ability of the individual to work with various information resources. This component consists of the following skills and abilities of the individual: to determine the purpose and information need of the problem, to correctly use information resources, to search for the necessary information, to critically evaluate the information obtained, etc. [296; 314].

The technical component reflects the ability of a person to use technical means correctly. This component is characterized by the presence of the individual's knowledge about the basics of the functioning of technical means, methods of data storage, the principles of operation of operating systems and office programs, the basics of work on the Internet [170; 296]. According to the conclusions of scientists, the scientific-activity component of a person's information competence ensures his ability to use various information and resources in his work. This component includes the following knowledge and skills: to use computer techniques for processing and storing information in electronic form, to use the Internet to solve tasks, to apply modern information and telecommunication technologies in the process of communication, navigate different software options, etc. [50; 170].

Some researchers (e.g. N. Balovsyak) argue that the information competence of the future specialist can be represented as the integration of two components: personal and professional-informational activities. The second component, being a set of professional knowledge, in skills and qualities, provides effective implementation of the information aspect of professional activity [9].

As it was found out in the study, many scientists in the structure of information competence of a specialist determine the components related to his motivational sphere. So M. Golova, separating the motivational component of this component, notes that it reflects the need of students in creation of

70

information models using computer technology, manifestation of interest in information activities, etc. [42].

The scientific ideas of K. Hordu were useful for our research, in which it is noted that the motivation of students, in particular medical universities, are a problem that teachers of these universities often face, therefore. It is necessary to purposefully form the motivation (in particular of information activity) of students, which makes it possible to greatly facilitate the learning process and to form in them the desire to constructively interact with other participants in the educational process [134, p. 53-54].

In the dissertation work of A. Tkachev, the motivational-targetive component of information competence is singled out. According to the scientist's views, the contents of this component is demonstrated in interest in information competence and motives for its mastery, the ability to formulate a number of diagnostic goals to ensure a sufficient level of its formation [184, p. 341].

Similar opinions are expressed by N. Nasyrov and, who also singled out a similar component. He explains that it ensures students' awareness of the need to develop motivation, form needs and interests for acquiring knowledge, skills and abilities in the field of technical, software tools of information [127, p.10].

O. Gryban clarifies that the motivation-targetive aspect of this competence reflects the realization by the subjects of training of the need to possess information technologies both in educational and future professional activities. That is why rather an important task, according to the scientist's view, is formation of a motivation for effective usage of information technologies [48, p. 84].

As noted in the scientific literature, the formation of appropriate motivation is a necessary aspect of information competence and the process of its formation in the individual. After all, the positively colored motivation of
students for the implementation of educational and professional activities contributes to the development of the personality of each student, develops his emotional and volitional sphere, and also contributes to increasing the effectiveness of this activity [117; 184]. Consequently, the presence of motivation of mastering information competence in future specialists implies their internal motivation to assimilate knowledge, skills, qualities necessary for effective work with information.

On the basis of studying and analyzing the scientific conclusions of scientists and their own teaching experience, it is determined that the first component of the information competence of future specialists is *motivational-targetive*. It reflects the formation of students' interest and need to work with information, motives for mastering information competence.

As it turned out, experts assign a prominent place in the structure of information competence of the future specialist to the cognitive-activity component. At the same time, scientists see the content of this component in:

- formation of the ideas of the subjects of training about modern information and communication technologies, knowledge about the essence and content of information competence, ways of mastering it, as well as the skills necessary for the successful application of information and communication technologies in practice, etc. [186, p. 347];

- the ability to use modern ICT to work with information and solve various tasks [69, p. 115-116];

- a set of knowledge that reflects the modern system of the information society and forms the informative basis of search cognitive activity; learned ways and activities, which determine the operational basis of search activities; experience and search activities in the field of software and technical resources; experience and construction of man-computer relations" [127, c.10];

- the totality of knowledge that makes up the system of the modern information society, information technology; skills of forecasting and

generating the use of new information; existing experience and skills in the implementation of general techniques and methods of intellectual activity, general and specific skills of working with data [42];

- the ability to carry out real actions in the field of information; development and professional habits regarding the use of information and computer technologies in their activities; the presence of automatic skills effectively work with information technologies; ability to optimally use professional knowledge and consciously solve educational and professional tasks [48, p. 85];

 a set of skills in processing information through mental operations (analysis, synthesis, comparison, generalization), outlining the prospects for the use of information [193, p.160];

system of knowledge, skills, principles of work with information flows [22; 71; 180];

– ability to search for information for the purpose of cognitive activity, comparison and analysis of information in order to combine or compare with existing knowledge bases; possession of basic IT skills; knowledge of information processes and technologies for solving practical problems; use the same type of functions in various programs, devices [94].

Emphasizing the important place of knowledge in the structure of information competence of students, it should be noted that the concept of "knowledge" is closely related to the key concept of the study "information". Knowledge is a result of mastering by a person's consciousness the outer world in general and at the same time the unity of ideas, thoughts, views in a certain field of activity (in our case - information activity). Not less important place while realizing the competence-oriented approach is taken by the issue of formation of the relevant skills of the subject of training, allowing him, on the basis of acquired knowledge with high quality, to perform certain actions or operations in the field of information.

Taking into account the above theoretical statements of scientists, it is determined that the second component of information competence is *cognitive-procedural*. Based on the analysis of scientific and pedagogical literature and on the outlined problem [45; 48; 69; 107; 127] the content of this component was determined, which is manifested *in* the formation of the students' knowledge necessary for working with information, as well as the corresponding groups of skills (information-analytical, constructive-projective, organizational-communicative, reflexive-evaluative).

The study determines that the scientists and in their writings pay considerable attention to the coverage of the close relationship between the motivational and axiological spheres of personality. In light of this, some researchers (O. Bismak, O. Zaitseva, I. Stetsenko, M. Tsareva, etc.) determine value-motivational component in the structure of information competence. According to O. Kryvonos, this component reflects the stable cognitive interest of students in information and computer technologies, as well as the desire for self-improvement and self-development in order to develop and improve the acquired information skills [98, p.119].

Of particular interest was the position of O. Kononyuk, who determined the content of the value-motivational component of the information competence of future students of medical specialties. So this component reflects the motives of the future medical worker as to mastering new knowledge, skills, habits in the information field and also desire of a person to get acquainted with modern innovations of the information world and to the use of information and computer technologies in educational and labor activities [94].

Noting the important role of values as a component of information competence of future specialists, it should be stated that personal values determine a person's professional and life priorities in general, and therefore largely affect the course and regulation of information activities. Also it is worth noting that the personal-value component of information competence of a

person is closely related to his value orientation, which, in turn, acts as an indicator of the formation of a person's value system. In particular, these value orientations are a "complex of spiritual determinants" of human activity, which "contains ideas, knowledge, motives, needs, ideals, attitudes, stereotypes, experiences, etc". [193, p.193]. In particular, in psychology and pedagogy, value orientations are commonly understood as a selective, socially conditioned, stable system in the direction of the interests and needs of the individual, which determines its attitude to the totality of material and spiritual public goods and ideals [45; 88; 154].

According to P. Khomenko, it is the personal-value component that contributes to the entry of the future specialist into the value system of the information society. According to A. Tkachev, the content of the personal-value component should also reflect the corresponding qualities formed in the students (responsibility, organization, independence, perseverance, attentiveness, willpower, etc.) and learned socially significant values such as: information, information and communication technologies, nature, harmony, life, etc. [185, p. 347].

A slightly different opinion on the outlined problem is expressed by M. Golovan, who includes the following in the composition of the personal-value component in information competence:

- a set of personally significant ideals, aspirations, attitudes, beliefs, attitudes to information processes;

- understanding of the need to master information competence for the effective implementation of professional activities;

 adequacy of self-esteem of own capabilities in the use of information technologies and resources, confidence in their choice and implementation;

own position on the use of information technology in future professional activities;

- the desire for self-actualization, self-development, self-improvement based on information technology;

- the ability to adequately navigate information innovations and take responsibility for the informatization of professional activities;

- ability to reflect in the field of search and transformation of information, the use of information technology;

introspection and self-assessment of their own professional activities
 based on information technology [42].

It should also be noted that in order to successfully master information competence, the future specialist needs to master the relevant personal qualities. (N. Balovsyak, N. Kohut [9; 87] and others), the obviousness of certain business and personal qualities is largely influenced by the effectiveness of information activities, the quality and reliability of its results.

In the light of the foregoing, it was concluded that the third component of the information competence of future specialists is *the personal-value* component. This component is connected with demonstration by students of such personal characteristics necessary for work with information (selfcriticism, responsibility, organization, independence, persistence, attentiveness, academic integrity etc) and also mastering such important values as information, information and communication technologies, justice, honesty, etc.

So, the study concluded that the information competence of higher education applicants includes the following components: motivational-targetive, cognitive-procedural and personal-value. The above content of these components is universal, and therefore it may be related to future specialists of any specialty. At the same time it is worth noting that the process of information competence formation in students of a certain profile demands specification of the content of the components on the basis of taking into account their professional activity.

Literature to chapter 1

1. Анисимов С. Р. Человек и машина (Философские проблемы кибернетики). Москва, 1959. 56 с.

2. Аніщенко О. В., Падалка О. С. Інформаційна культура педагога. *Education and Science*. URL: <u>http://www.rusnauka.com/12.APSN_2007</u> /<u>Pedagogica/20930.doc.htm</u> (дата звернення: 23.10.2021).

3. Антонова О. Є., Маслак Л. П. Європейський вимір компетентнісного підходу та його концептуальні засади. *Професійна педагогічна освіта: компетентнісний підхід*: монографія / за ред. О. А. Дубасенюк. Житомир, 2011. С. 81–109.

4. Антонченко М. О. Інформаційна культура як складова загальнолюдської культури. *Комп'ютерні технології навчання*. Київ: НПУ ім. Драгоманова, 2004. Вип 9. С. 234–241.

5. Афанасьев В. Г. Системность и общество. Москва, 1980. 368 с.

6. Бабин I., Болюбаш Я., Гармаш А. Національний глосарій: вища освіта. Київ : ТОВ Вид. дім «Плеяди», 2011. 100 с.

7. Баззел Р. Д., Кокс Д. Ф., Браун Р. В. Информация и риск в маркетинге; пер. с англ. под ред. М. Р. Ефимовой. Москва: Финстатинформ, 1993. 95 с.

8. Баловсяк Н. Інформаційна компетентність. *Педагогіка і психологія професійної освіти*. 2004. № 5. С. 21–28.

9. Баловсяк Н. Х. Структура та зміст інформаційної компетентності майбутнього спеціаліста. *Науковий часопис НПУ імені М. П. Драгоманова. Серія 2. Комп'ютерно-орієнтовані системи навчання*: зб. наук. пр. Київ, 2006. № 4 (11). С. 3–6. URL: <u>http://enpuir.npu.edu.ua</u> /bitstream/123456789/888/1/30.pdf. (дата звернення: 23.03.2022).

10. Балух В. О. Історія античної цивілізації: підручник для студ. вищ. навч. закл.: у 3 т. Т. 1 : Стародавня Греція. Чернівці: Наші книги, 2008. 656 с.

11. Балух В. О., Коцур В. П. Культура Античності : підручник. [2-е вид., стереотип.]. Чернівці: Наші книги, 2016. 632 с.

12. Балюк В. О. Дидактичні умови формування інформаційнокомунікаційної компетентності майбутніх фахівців економічного профілю в освітньому середовищі університету: дис. ... канд. пед. наук: 13.00.09 / Полтавський нац. пед. ун-т імені В. Г. Короленка. Полтава, 2020. 317 с.

13. Барановська Л. В. Методичний аспект навчання студентів в умовах англомовного проекту. Подолання мовних та комунікативних бар'єрів: *Методика викладання гуманітарних дисциплін студентам немовних спеціальностей* : матеріали міжнар. наук.-практ. конф. (Київ, 7–8 червня 2013 р.). Київ : Національний авіаційний університет, 2013. С. 6–9.

14. Барановська О. Інформаційні компетентності учнів як дидактична категорія. *Біологія і хімія в школі*.2004. № 6. С. 32–34.

15. Бачило И. Л., Лопатин В. Н., Федотов М. А. Информационное право: учеб. /под ред. Б. Н. Топорнина. СПб : СПб гос. ун-т, 2001. 220 с.

16. Беспалов І. О. Сократ – його філософія та діалогічний метод. Вісник Харківського національного університету імені В. Н. Каразіна. Серія: Теорія культури і філософія науки, 2019. Вип. 59. С. 34–40. URL: <u>https://doi.org/10.26565/2306-6687-2019-59-05</u> (дата звернення: 20.10.2022).

17. Беспалов П. В. Акмеологическая концепция развития информационно-технологической компетентности государственных служащих: автореф. дис. ... д-ра пед. наук: 19.00.13. Москва, 2006. 65 с.

18. Беспалов П. В. Акмеологический подход к формированию и развитию информационно-технологической компетентности государственных служащих. Информационные технологии в

образовании – 2003: матер. конф. URL: http://ito.edu.ru/2003/II/3/II-3-2414.html (дата звернення: 23.09.2020).

19. Бєсова О. Г. Інформаційна компетентність як складова професійної компетентності майбутнього вчителя математики. *Педагогічні науки: meopiя, icmopiя, iнноваційні mexнології*. 2014. № 5. С. 157–162. URL: <u>http://nbuv.gov.ua/UJRN/pednauk_2014_5_21</u> (дата звернення: 20.03.2022).

20. Бібік Н. В. Компетентнісний підхід: рефлексивний аналіз. Компетентнісний підхід у сучасній освіті: світовий досвід та українські перспективи: Бібліотека з освітньої політики / за заг. ред. О. В. Овчарук. Київ : «К.І.С.», 2004. С. 45–50.

21. Білик Н. М. Переваги і ризики запровадження компетентнісного підходу в шкільній освіті. *Український педагогічний журнал*. 2015. № 1. С. 47–58.

22. Бісмак О. Формування інформаційно-комунікаційної компетентності майбутніх фахівців з фізичної реабілітації. *Освітологічний дискурс*. 2017. № 3–4. С. 338–351.

23. Боер В. О., Павельева В. М. Информационное право. Ч. 1: [учеб. пособие]. СПб. : ГУАП, 2006. 116 с.

24. Бойцова О. М. Структура інформаційної компетентності та її аналіз для процесу професійної підготовки. *Наукові праці Донецького національного технічного університету. Серія: педагогіка, психологія і соціологія.* Донецьк, ДонНТУ, 2011. Вип. 9. URL: <u>http://archive.nbuv.gov.ua/portal/soc_gum/Npdntu_pps/2011_9/boytsova.pdf</u> (дата звернення 25.04.2021).

25. Бондар С. Компетентність особистості – інтегрований компонент навчальних досягнень учнів. *Біологія і хімія в школі*. 2003. № 2. С. 8–9.

26. Бондар С. П. Інтерактивні технології навчання в підготовці майбутніх учителів зарубіжної літератури: метод. рекомендації;

Кам'янець-Поділ. нац. ун-т імені Івана Огієнка. Кам'янець-Подільський: Аксіома, 2012. 43 с.

27. Борисов П. П. Компетентностно-деятельный подход и модернизация содержания общего образования. *Стандарты и мониторинг в образовании*. 2003. № 1. С. 58–61.

28. Борисюк О. М. Поняття «компетентність» в сучасній психологопедагогічній літературі. *Проблеми екстремальної та кризової психології*. 2013. Вип. 14, ч. II. С. 43–51.

29. Боровик М. В. Інформація як основа інформаційнокомунікаційного забезпечення сталого розвитку закладів вищої освіти. Науковий вісник Ужгородського національного університету. Серія: Міжнародні економічні відносини та світове господарство. 2018. Вип. 20, Ч. І. С. 56–59.

30. Бочевар А. Г. Формування інформаційно-комунікативної компетентності майбутніх юристів засобами мультимедійних технологій: дис. ... канд. пед. наук: 13.00.04. Чернігів, 2017. 317 с.

31. Вдовиченко Р. П. Управлінська компетентність керівника школи. Харків: Вид група «Основа», 2007. 112 с.

32. Винер Н. Кибернетика, или Управление и связь в животном и машине; пер. с англ. И. В. Соловьева и Г. Н. Поварова; под ред.
Г. Н. Поварова; 2-е изд. Москва: Наука; Глав. ред. изд. для заруб. стран, 1983. 344 с.

33. Вітвицька С. С. Компетентнісний та професіографічний підходи до побудови професіограми магістра освіти. *Вісник [Житомир. держ. унту імені І. Франка]*. Житомир, 2011. Вип. 57. Педагогічні науки. С. 52–58.

34. Вітвицька С. С. Основи педагогіки вищої школи: навч. посіб. Київ: Центр навчальної літератури, 2003. 316 с.

35. Волікова М. М. Сутність понять «компетенція» та «компетентність» в науковому дискурсі. Вісник Чернігівського

національного педагогічного університету імені Т.Г. Шевченка. 2019. Вип. 5 (161). С. 37–43.

36. Воронов С. А. Компетенция и компетентность как категории деятельности: сходства и различия в понимании. Историческая и социальная образовательная мысль. 2017. Т. 9. N 6., ч. 1. С. 165–172.

37. Гендина Н. И. Информационная культура и информационное образование. *Информационное общество: культурологические аспекты и проблемы:* тезисы докл. Междунар. науч. конф. (Краснодар; Новороссийск, 17–19 сент. 1997 г.). Краснодар, 1997. С. 102–104.

38. Герчанівська П. Е. Культурологія: термінологічний словник.Київ: Національна Академія керівних кадрів культури і мистецтв, 2015.439 с.

39. Глинська М. «Компетенція» та «компетентність». У чому piзниця? URL:https://ukrainian.stackexchange.com/questions/3831/ Компетенція-і- компетентність-чи-є-різниця (дата звернення 20.01.2022)

40. Гнатенко Я.В. Формування міжкультурної компетентності майбутніх бакалаврів з міжнародної економіки у процесі професійної підготовки : автореф. дис. ... канд. пед. наук : 14.00.04. Полтава, 2021. 20 с.

41. Голованова Т. Педагогічні компетентності вчителя початкових класів до проблеми визначення змісту і обсягу. *Імідж сучасного педагога*. 2005. № 9–10. С. 38–40.

42. Головань М. С. Інформатична компетентність: сутність, структура та становлення. *Інформатика та інформаційні технології в навчальних закладах.* 2007. № 4. С. 62–69.

43. Головань М. С. Компетенція і компетентність: досвід теорії, теорія досвіду. *Вища освіта України*. 2008. № 3. С. 23–30.

44. Головань М. С. Компетенція та компетентність: порівняльний аналіз понять. *Педагогічні науки: теорія, історія, інноваційні технології*. 2011. № 8. С. 224–233.

45. Гончаренко С. Український педагогічний словник. Київ: Либідь, 1997. 374 с.

46. Гончаренко С. У. Український педагогічний енциклопедичний словник. Вид. 2-ге, доповн. й переробл. Рівне : Волинські обереги, 2011. 519 с.

47. Гончарова О. Н. Теоретико-методические основы личностноориентированной системы формирования информатических компетентностей студентов экономических специальностей: дис д-ра пед. наук: 13.00.02. Симферополь, 2007. 471 с.

48. Грибан О. Н. Формирование информационной компетентности студентов педагогического вуза: монография; ФГБОУ ВПО «Урал. гос. пед. ун-т». Екатеринбург, 2015. 162 с.

49. Гриценко А. П. Методика формування в старшокласників умінь використовувати інформаційні ресурси. *Наукові записки Бердянського державного педагогічного університету*. Педагогічні науки: зб. наук. пр. Бердянськ : БДПУ, 2014. Вип. 3. С. 50-56.

50. Грицька Т. С. Етапи формування інформаційних компетентностей учнів. *Комп'ютер у школі та сім'ї*. 2010. № 1. С. 41–42.

51. Гришина И. В. Профессиональная компетентность руководителя школы как объект исследования: монография. Спб.: СПбГУПМ, 2002. 232 с.

52. Гуменна Л. Розвиток інформаційно-аналітичної компетентності педагогічних працівників закладів професійної (професійно-технічної) освіти. Науковий вісник Інституту професійно-технічної освіти НАПН України. Професійна педагогіка. 2018. № 15. С. 101–108.

53. Гуралюк А. Г. Інформаційна, комунікаційна та комунікативна компетентності у підвищенні кваліфікації керівника навчального закладу. URL: <u>http://tme.umo.edu.ua/docs/5/11gurdeo.pdf</u> (дата звернення 23.04.2021).

54. Гуревич Р. С. Інформаційна культура педагога як необхідний компонент сучасної освіти. *Сучасні інформаційні технології та інноваційні методики навчання в підготовці фахівців: методологія, теорія, досвід, проблеми* : зб. наук. пр. Вінниця : ТОВ Фірма «Планер», 2010. Вип. 23. С. 190–195.

55. Гуревич Р. С. Формування інформаційної компетентності майбутніх учителів засобами мультимедіа–технологій. *Наукові записки*. *Серія: Педагогіка*. 2007. № 7. С. 37–44.

56. Гусейнов А., Иррлитц Г. Краткая история этики. Москва : Мысль, 1987. 589 с.

57. Дегтярьова Г. А. Формування ІКТ-компетентності вчителівфілологів у системі неперервної освіти спеціаліста. URL: <u>http://tme.umo.edu.ua/docs/5/11degsue.pdf</u> (дата звернення : 24.12.2021).

58. Демешкант Н. А. Розвиток дослідницьких умінь як основа формування наукового світогляду студентів вищих навчальних закладів. *Нові технології навчання*: наук.-метод. зб. Київ, 2007. Вип. 47. С. 23–25.

59. Демченко Н. М. Сутність інформаційної компетентності сучасного фахівця. *Наукові записки НДУ ім. М. Гоголя. Серія: Психологопедагогічні науки.* 2019. № 4. С. 87–96.

60. Державне управління та державна служба: словник-довідник / уклад. О. Ю. Оболенський. Київ : КНЕУ, 2005. 480 с.

61. Дідух Л. І. Інформаційно-комунікативна компетентність викладача. Проблеми та перспективи формування національної гуманітарно-технічної еліти. 2013. № 32–33 (36–37). С. 150–155.

62. Добротвор О. В. Комунікативна компетентність як предмет наукового дослідження. *Педагогічний процес*: зб. наук. праць. Київ:

Едельвейс, 2013. Вип. 3. С. 56–61. URL : www.twirpx.com/file/1665580 (дата звернення: 24.11.2016).

63. Древнегреческая философия. От Платона до Аристотеля [пер. с древнегреч.] / Сост., вступ. ст., коммент. В. Шкоды. Харьков: Фолио; Москва : АСТ, 1999. С. 670–699.

64. Дрогайцев О. І. Формування інформаційної компетентності студентів вищих навчальних закладів у процесі навчання гуманітарних дисциплін : автореф. дис. ... канд. пед. наук : 13.00.09. Кривий Ріг, 2009. 20 с.

65. Дрокіна А. С. Формування інформаційної компетентності майбутніх учителів початкової школи в процесі професійної підготовки: автореф. дис. ... канд. пед. наук : 13.00.04. Харків, 2020. 20 с.

66. Дрокіна А. С. Формування інформаційної компетентності майбутніх учителів початкової школи в процесі професійної підготовки: дис. ... канд. пед. наук : 13.00.04. Харків, 2020. 305 с.

67. Дундюк А. Ю. Формування професійної компетентності майбутніх техніків-технологів з використанням інформаційнокомунікаційних технологій у автотранспортних коледжах: дис. ... д-ра пед. наук: 13.00.09. Хмельницький, 2021. 313 с.

68. Ёрмирзоева Ф. А. «Информация» и «знание»: анализ соотношения статуса понятий в условиях информационного общества. Вестник Таджикского государственного университета права, бизнеса и политики. Серия гуманитарных наук. 2018. Вып. 7. С. 48–57.

69. Заводнюк В. Л. Формування інформаційної компетентності учнів на уроках предмету «Технології» Сучасні інформаційні технології та інноваційні методики навчання в підготовці фахівців: методологія, теорія, досвід, проблеми. 2011. № 28. С. 114–118.

70. Завьялов А. Н. Формирование информационной компетентности у будущих специалистов в области новых информационных технологий. Международный конгресс конференций «Информационные технологии в образовании». XIII Международная конференция, «Информационные технологии в образовании»: сб. трудов участников конф. Ч. III. (16–20 ноября, 2003 г.). Москва : Просвещение, 2003. С. 34–35.

71. Зайцева О. Б. Формирование информационной компетентности будущих учителей средствами инновационных технологий: дис. ... канд. пед. наук. Армавир, 2002. 169 с.

72. Запорожцева Ю. С. Інформаційно-цифрова компетентність як складник сучасного навчально-виховного процесу. *Інноваційна педагогіка*. 2019. Вип. 12. Т. 1. С. 79–82.

73. Зеер Э. Ф., Павлова А. М., Сыманюк Э. Э. Модернизация профессионального образования: компетентностный подход: учеб. пособие. Москва : Московский психолого-социальный институт, 2055. 216 с.

74. Зимняя И. Ключевые компетентности – новая парадигма результата образования. *Высшее образование сегодня*. 2003. № 5. С. 34–42.

75. Зимняя И. А. Ключевые компетентности как результативноцелевая основа компетентностного подхода в образовании. Авторская версия. *Россия в Болонском процессе : проблемы, задачи, перспективы*: труды методологического семинара. Москва: Исследовательский центр проблем качества подготовки специалистов, 2005. 40 с.

76. Зязюн І. А. Філософія педагогічної якості в системі неперервної освіти. Вісник [Житомир. держ. ун-ту імені І. Франка]. 2005. № 25. С. 13–18.

77. Иванова Е. В. Информационная компетентность учителя в современной школе. *Письма в emmissia.offline*. 2003. URL: <u>http://www.emissia.org/offline/2003/922.htm</u> (дата звернення 23.04.2021).

78. Информатика: Энциклопедический словарь для начинающих / сост. Д. А. Поспелов. Москва : Педагогика-Пресс, 1994. 352 с.

79. Ионова О. Н. Теоретические аспекты формирования информационной компетентности взрослых. Открытое и дистанционное образование. 2007. Вып 1(25). С. 5–10.

80. Казарина Л. А. Формирование исследовательской компетентности учащихся профильных гуманитарных классов общеобразовательной школы: дис. ... канд. пед. наук. Томск, 2016. 193 с.

81. Калінін В. О. Формування професійної компетентності майбутнього вчителя іноземної мови засобами діалогу культур: автореф. дис. ... канд. пед. наук: 13.00.04. Житомир, 2005. 20 с

82. Калюжна Н. Г. Адекватність як інтегральна характеристика якості управлінської інформації: теоретичні передумови забезпечення. Маркетинг і менеджмент інновацій. 2015. № 2. С. 108–120.

83. Карлінська Я. В. Інформаційна компетентність студентів як чинник. *Вісник Житомирського державного університету*. Вип. 40. Педагогічні науки. 2008. С. 147.

84. Карлінська Я. В. Професійна педагогічна освіта: компетентнісний підхід: монографія. Житомир: ЖДУ ім. І. Франка, 2011. С. 311–319.

85. Кисла І. Г. Підходи до формування інформаційної компетентності вчителя загальноосвітнього навчального закладу. *Інформаційні технології в освіті.* 2008. № 2. С. 110–113.

86. Кобзар Н. В. Поняття «компетентність», «компетенція" і «готовність до діяльності» в сучасній освітній парадигмі. *Науковий вісник Донбасу*. 2010. № 3. Режим доступу: <u>http://nbuv.gov.ua/UJRN</u> /nvd_2010_3_5. (дата звернення: 06.07.2018).

87. Когут I. Інформаційна компетентність як структурний компонент професійно-педагогічної комунікативної компетентності педагога в сучасному освітньому просторі. *Освітологічний дискурс*. 2018. № 3–4. С. 234–245.

88. Коджаспирова Г. М., Коджаспиров А. Ю. Педагогический словарь. Москва: ИКЦ «Март»; Ростов-на-Дону : Издат. центр «Март», 2005. 448 с.

89. Козловская А. Б. Свойства и функции информации в кратком газетном сообщении. *Гуманітарний вісник. Вища освіта України у контексті інтеграції до європейського освітнього простор: темат. вип.* 2012. Дод. 1. Вип. 27. Т. V (38). С. 204–208.

90. Кокнова Т. А. Теорія і практика формування лінгвометодичної компетентності майбутніх викладачів іноземних мов у процесі фахової підготовки: дис. ... д-ра пед. наук: 13.00.04. Старобільськ, 2021. 610 с.

91. Компетентнісний підхід до підготовки педагогів у зарубіжних країнах : теорія та практика : монографія / [Н. М. Авшенюк, Т. М. Десятов, Л. М. Дяченко, Н. О. Постригач, Л. П. Пуховська, О. В. Сулима]. Кіровоград : Імекс-ЛТД, 2014. 280 с.

92. Компетентнісний підхід у сучасній освіті: світовий досвід та українські перспективи: Бібліотека з освітньої політики / під заг. ред.
О. В. Овчарук. Київ : «К. І.С», 2004. 112 с.

93. «Компетенція» і «компетентність»: чи є різниця? Ukrainian Language Stack Exchange. URL: <u>https://ukrainian.stackexchange.com</u>/<u>questions/3831/Компетенція-i-%20компетентність-чи-є-різниця</u> (дата звернення: 23.01.2022).

94. Кононюк О. В. Формування інформаційно-комунікативної компетентності викладача вищої школи. *Педагогічне Криворіжжя*. 2020. № 6. С. 79–80.

95. Коношевський Л. Л., Стецька Ю. В. Особливості формування основ інформаційної культури дітей старшого дошкільного віку в закладі дошкільної освіти. Сучасні інформаційні технології та інноваційні методики навчання у підготовці фахівців: методологія, теорія, досвід,

проблеми: зб. наук. пр. Київ-Вінниця : ТОВ фірма «Планер», 2018. Вип. 51. С. 63–67.

96. Кохановська О. В. Інформація як об'єкт цивільних правовідносин. Вісник Київського Національного університету імені Тараса Шевченка. Юридичні науки. 2005. Вип. 63–64. С. 73–76.

97. Кравцов О. В. Формування інформаційно-комунікативної компетентності публічних службовців в умовах розвитку електронного урядування. *Публічне адміністрування: теорія та практика* : зб. наук. пр. Дніпро, 2016. Вип. 1(15). URL : <u>http://www.dridu.dp.ua/zbirnik/2016-01(15)/10.pdf</u>. (дата звернення 23.04.2021).

98. Кривонос О. М. Склад основних компонентів інформаційнокомунікаційних компетентностей вчителя інформатики. *Вісник Житомирського державного університету*. Вип. 1 (73). Педагогічні науки. 2014. С. 118–123.

99. Кубенко I. М. Що таке компетентність і як її розуміють в освіті. Теорія та методика управління освітою (Додаток до електронного журналу). 2010. № 1. URL: http://tme.umo.edu.ua/docs/Dod/1.../kubenko. pdf (дата звернення: 09.08.2019).

100. Кучай О. В. Компетенція і компетентність – відображення цілісності та інтеграційної суті результату освіти. *Рідна школа*. 2009. № 11. С. 44–48.

101. Кучерук О. А. Педагогічні технології в лінгвометодичній підготовці вчителя-філолога. *Науковий часопис НПУ імені М. П. Драгоманова. Серія: Творча особистість учителя: проблеми теорії і практики*. Київ : Вид-во НПУ імені М. П. Драгоманова, 2013. Вип. 20 (30). С. 132–136.

102. Кушерець В. І. Знання як стратегічний ресурс суспільних трансформацій. Київ: Знання України, 2004. 248 с.

103. Лаврова А. В. Формування предметної компетентності учнів старшої школи під час навчання фізики. *Kluczowe aspekty naukowej działalności*. 2015. № 7. S. 10-13. URL: <u>https://lib.iitta.gov.ua/11042</u>/<u>1/Lavrova.pdf</u> (дата звернення : 24.11.2021).

104. Лазор О. Місцеве управління: поняття, терміни, визначення : навч. посіб. 2-е вид., перероб. і доп. Київ : Дакор, 2006. 352 с.

105. Литвин А, Литвин О. Інформатична компетентність викладача. *Інформація, комунікація, суспільство 2015*: матеріали 4-ої Міжнар. наук. конф. ІКС2015 (Львів, 20-23 травня 2015 р.). Львів: Вид-во Львівської політехніки, 2015. С. 94–95.

106. Лобач Н. В. Формування інформаційно-аналітичної компетентності майбутніх лікарів в освітньому середовищі вищого медичного навчального закладу: дис. ... канд. пед. наук: 13.00.04. Полтава, 2016. 234 с.

107. Лупиніс Т. Структура інформаційної компетентності магістрантів соціальної роботи. *Теорія і практика управління соціальними системами*. 2012. Вип. 2. С. 104–114.

108. Лымарев В. Н. Функции компетентности субъекта учебной деятельности высшей военной школы. *Обучение и воспитание: методики и практика:* материалы междунар. науч.-практ. конф. Новосибирск, 2012. С. 169–174.

109. Максименко Ю. Б., Матохнюк Л. О. Теоретичний аналіз проблеми становлення інформатизації суспільства та його впив на особистість. *Глобальні виклики педагогічної освіти в університетському просторі*: матеріали III Міжнародного Конгресу (м. Одеса, 18-21 травня 2017 року) / Південноукраїнський національний педагогічний університет імені К. Д. Ушинського. Одеса: Вид. дім «Гельветика», 2017. 678 с.

110. Маркова А. К. Психология профессионализма. Москва: Знание, 1996. 308 с.

111. Мармураш Л. П. Розвиток гуманістичної спрямованості педагогічної думки в епоху віхових культур Стародавнього світу і Середньовіччя: дис. ... канд. пед. наук: 13.00.01. Тернопіль, 2009. 208 с.

112. Массовая информация в советском промышленном городе: опыт комплексного социологического исследования / Б. А. Грушин, Л. Н. Федотова, Е. Я. Таршис и др.; под общ. ред. Б. А. Грушина, Л. А. Оникова. Москва: Политиздат, 1980. 446 с.

113. Материалисты Древней Греции: собр. текстов Демокрита, Гераклита, Эпикура. Москва, 1955. 239 с.

114. Матминас Е. З. К классификации информации в экономике. Экономика и математические методы. Москва: Спарк, 1965. Т. 1. Вып. 4. С. 112–120.

115. Мацюк О. О. Формування професійної компетентності майбутніх перекладачів засобами інформаційно-комунікаційних технологій: автореф. дис. ... канд. пед. наук : 13.00.04. Хмельницький, 2011. 21 с.

116. Мачуський В. В. Сучасне розуміння компетентнісного підходу в навчально-виховному процесі. *Сучасний виховний процес: сутність та інноваційний потенціал*: матеріали звіт. наук.-практ. конф. Ін-ту проблем виховання НАПН України за 2013 р. Івано-Франківськ, 2014. Вип. 4. С. 69–72.

117. Мельман В. Психологічні фактори мотивації навчальнопрофесійної діяльності студентів вищих навчальних закладів. *Новий колегіум*. 2009. № 6. С. 56–59.

118. Мельник В. Стандарти управлінської кваліфікації керівника навчального закладу. *Директор школи, ліцею, гімназії*. 2002. № 4. С. 8–82.

119. Мерзликін О. В. Формування дослідницьких компетентностей старшокласників з фізики засобами хмарних технологій. *Розвиток дослідницької компетентності молодих науковців у контексті*

гармонізації систем підготовки Ph. D. в ЄС: матеріали II всеукр. наук.практ. семінару. Київ : ТОВ «IMA-прес», 2016. С. 59–62.

120. Миронова О. І. Формування інформаційної компетентності студентів як умова ефективного здійснення інформаційної. *Вісник ЛНУ імені Тараса Шевченка*. 2010. № 17 (204). С. 165–175.

121. Моль А. Социодинамика культуры. Москва: Прогресс, 1973. 150 с.

122. Морзе Н. В. Методика навчання інформатики. Ч. 1. Загальна методика навчання інформатики: навч. посіб. Київ: Навчальна книга, 2003. 254 с.

123. Моштук В. Фахова компетентність як основа проектнотехнологічної культури майбутнього вчителя трудового навчання. *Молодь і ринок*. 2011. № 7 (78). С. 108–112.

124. Муранова Н. П., Федорова Н. Ф. Компетенції та компетентності в освіті. Освіта та розвиток обдарованої особистості. 2017. № 5(60). С. 57–62.

125. Мурована Н. Педагогічне керівництво розвитком професійної компетентності вчителів (з досвіду роботи інституту післядипломної освіти Севастопольського міського гуманітарного університету). *Імідж* сучасного педагога. 2006. № 3–4. С. 21–24.

126. Нагорна Н. В. Формування у студентів понять компетентності й компетенції. *Виховання і культура*. 2007. № 12. С. 266–268.

127. Насырова Н. Х. Проектирование подготовки студентов гуманитарных факультетов классического университета по информатике : автореф. дис. ... канд. пед. наук. Казань, 2000. 17 с.

128. Недбай В. В. Проектная методика как фактор развития информационной компетентнции школьника на уроке иностранного языка в средней школе. *Всероссийский августовский педсовет.* 2001. URL:

(<u>http://2001.pedsovet.alledu.ru/news.php?n=311&c=42</u>) (дата звернення: 16.05.2021).

129. Ніколаєва С. Ю. Цілі навчання іноземних мов в аспекті компетентнісного підходу: методичний матеріал. *Іноземні мови*. 2010. № 2. С. 11–17.

130. Новий тлумачний словник української мови (у трьох томах). Т. 1. А – К / уклад.: В. В. Яременко, О. М. Сліпушко. Київ: Вид-во «АКОНІТ», 2006. 926 с.

131. Овчарук О. В. Розвиток компетентнісного підходу: стратегічні орієнтири міжнародної спільноти. *Компетентнісний підхід у сучасній освіти: світовий досвід та українські перспективи* / [за заг. ред. О. В. Овчарук]. Київ, 2004. С. 6–15.

132. Овчарук О. В. Цифрова компетентність учителя: міжнародні тенденції та рамки. New pedagogical thought. 2019. URL: https://doi.org /10.37026/2520-6427-2019-100-4-52-55 (дата звернення: 23.10.2022).

133. Ожегов С. И. Словарь русского языка. 12-е изд. Москва : Русский язык, 1978. 468 с.

134. Орду К. С. Формування інформаційно-комунікативної компетентності майбутніх сімейних лікарів у професійній підготовці : дис.
... д-ра філософії в галузі педагогіки : 015. Професійна освіта. Одеса. 2021.
318 с.

135. Основи нових інформаційних технологій навчання: посіб. [Машбиць Ю. І., Смульсон М. Л., Коміссарова О. Ю. та ін.]. Київ : I3MH, 1997. 264 с.

136. П'янковська І. В. «Компетенція» та «компетентність»; як провідні поняття компетентнісного підходу. *Наукові записки Національного університету «Острозька академія». Серія : Психологія і педагогіка.* 2010. Вип. 15. С. 202–211.

137. Палицын В. К вопросу о соотношении понятий «знания», «информация», «данные». *Наука и инновации*. 2018. № 2(180). С. 44–49.

138. Пантелеев Э. Е. Будущее образования – в информационном обществе или в обществе знаний? *Вестник ТГПУ (TSPU Bulletin)*. 2015. Вып. 5 (158). С. 112.

139. Песталоцці І. Г. Пам'ятна записка Песталоцці. Шкільна бібліотека. 2011. № 8. С. 130–143.

140. Пєтухова Л. Є. Теоретико-методологічні засади формування інформатичних компетентностей майбутніх учителів початкових класів : дис. канд. пед. наук :13.00.04. Херсон, 2009. 564 с.

141. Платон. Апология Сократа. Критон. Ион. Протагор [ред. А. Ф. Лосев]. Москва : Мысль, 1999. 864 с.

142. Платон. Собрание сочинений: в 4 т. Т. 3. / пер. с древнегреч. Москва : Мысль, 1994. 654 с.

143. Плахотнік О., Безносюк О. Компетентнісний підхід у ВНЗ: проблеми та перспективи. *Наукові записки [Кіровоградського державного педагогічного університету імені Володимира Винниченка]*. Серія : Педагогічні науки. Кіровоград, 2013. Вип. 121(ІІ). С. 202–207.

144. Полат Е. С. Комплексное использование средств обучения на уроках иностранного языка в языковой лаборатории. *Методика и техника* эффективного использования средств обучения в учебно-воспитательном процессе : сб. науч. тр. / под ред. Л. П. Прессмана и Х. Вайма. Москва : Изд-во АПН СССР, 1984. С. 49–58.

145. Поліщук Т. В. Формування інформаційно-комунікативної компетентності в офіцерів тактичного рівня підготовки (результати експериментального дослідження). Вісник Національного університету оборони України. 2013. № 2 (33). С. 114–119.

146. Полякова Г. Теоретико-методологічні основи компетентнісно орієнтованого навчального процесу. *Імідж сучасного педагога*. 2005. № 9–10. С. 22–24.

147. Пометун О. І. Компетентнісний підхід у сучасній історичній освіті. *Історія в школах України*. 2007. № 6. С. 3–12.

148. Пометун О. І. Теорія та практика послідовної реалізації компетентнісного підходу в досвіді зарубіжних країн. *Компетентнісний підхід у сучасній освіті : світовий досвід та українські перспективи /* під заг. ред. О. В. Овчарук. Київ : «К.І.С», 2004. С. 15–24.

149. Пономаренко В. С., Гонтарєва І. В. Методологія комплексного оцінювання ефективності розвитку підприємств : монографія; за заг. ред. д-ра. екон. наук, проф. В. С. Пономаренко. Харків : ХНЕУ ім. С. Кузнеця, 2015. 404 с.

150. Поскрипко Ю. А., Данченко О. Б. Компетенція і компетентність: консенсус. *Вчені записки Університету «КРОК»* 2019. №3 (55). С. 117–127.

151. Примачок Л. Л. Структура професійної компетентності фахівця з фізичної реабілітації. *Актуальні проблеми психології. Серія: Психологія обдарованості*: зб. наук. праць Інституту психології імені Г. С. Костюка НАПН України. 2019. Т. 16. 238–250.

152. Про інформацію : Закон України від 02.10.1992 р. № 2657-XII : станом на 15 черв. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/2657-12#Text (дата звернення: 23.10.2022).

153. Професійна освіта: словник: навч. посіб. / уклад. С. У. Гончаренко та ін.; за ред. Н. Г. Ничкало. Київ : Вища шк., 2000. 380 с.

154. Психологічний словник / за ред. В. І. Войтка. Київ : Либідь, 1982. 215 с.

155. Рашкевич Ю. М. Болонський процес та нова парадигма вищої освіти : монографія. Львів : Вид-во Львівської політехніки, 2014. 168 с.

156. Речицький В. В. Відкритість інформації як універсальна вимога. Вісник Національної Академії наук України. 2003. № 9. С. 26–45.

157. Родигіна І. Реалізація компетентнісного підходу до навчання (управлінський аспект). *Освіта і управління*. 2004. № 3–4. С. 19.

158. Ростовська В. І. Формування інформаційної культури керівника загальноосвітнього навчального закладу. *Innovative solutions in modern science*. 2016. № 4 (4). URL: https://naukajournal.org/index.php/ISMSD/article /viewFile/882/1024 (дата звернення 20.05.2020).

159. Руссо Ж.-Ж. Избранные труды: в 3 т. Москва: ГИХЛ, 1961. Т. 1. 750 с.

160. Рыжаков М. В. Государственный образовательный стандарт основного общего образования (теория и практика). Москва: Педагогическое общество России, 1999. 544 с.

161. Савченко О. Я. Уміння вчитися як ключова компетентність загальної середньої освіти. *Компетентнісний підхід у сучасній освіти: світовий досвід та українські перспективи* / [за заг. ред. О. В. Овчарук]. Київ, 2004. С. 34–46.

162. Самко А. В., Галиця В. В. Методичні аспекти викладання фармацевтичних дисциплін при впровадженні інформаційних технологій. Запорожский медицинский журнал. 2012. № 6. С. 127. URL: http://nbuv.gov.ua/UJRN/Zmzh_2012_6_51 (дата звернення: 04.04.2022).

163. Самойленко Н. І., Семко Л. П. Формування інформаційних компетенцій на уроках інформатики в основній школі. *Компетентнісні засади змісту освіти в 11- річній школі* : матеріали Всеукр. наук-практ. конф. (28-29 березня 2013 р.). Київ : Оберіг, 2013. С. 435–439.

164. Сандуляк Т. Нові компетенції викладачів і слухачів для роботи із системами електронної освіти та медицини. *Проблеми сучасної освіти*. 2019. № 8. URL :https://periodicals.karazin.ua/issuesedu/article/view/12996 (дата звернення : 24.11.2021).

165. Сапир Ж. К экономической теории неоднородности систем: Опыт исследования децентрализованной экономики [пер. с фр.; под науч. ред. Н. А. Макашовой]. Москва : ВШЭ, 2001. 248 с.

166. Сейтенова С. С., Мухангалиева Ш. А. Развитие исследовательской компетентности, как критерий успешности будущего педагога. *Международный журнал экспериментального образования*. 2013. № 8. С. 56–59.

167. Семеніхіна О. В. Юрченко А. О. Формування інформатичної компетентності вчителя математики і фізики на основі використання спеціалізованого програмного забезпечення. *Наукові записки. Серія: Проблеми методики фізико-математичної і технологічної освіти.* 2015. № 8. С. 52–57.

168. Семенов А. Л. Роль информационных технологий в общем среднем образовании. *Информатика и образование*. 2001. № 2. С. 2–6.

169. Семёнов А. Л. Роль информационных технологий в общем среднем образовании. Москва : Изд-во МИПКРО, 2000. 12 с.

170. Семко Л. П., Самойленко Н. І. Компетентнісний підхід до навчання інформатики в основній школі. *Наукові записки. Серія: Проблеми методики фізико-математичної і технологічної освіти.* Ч. 2. Кіровоград : РВВ КДПУ ім. В. Вінниченка, 2013. Вип. 4. С. 63–67.

171. Сисоєва С. О. До проблеми організації творчої навчальної діяльності учнів. *Обдарована дитина*. 2001. № 8. С. 2–8.

172. Ситаров В. А. Дидактика: учеб. пособие / под ред. В. А. Сластенина. 2-е изд., стереотип. Москва: Издат. центр «Академия», 2004. 368 с.

173. Сіненко К. О. До проблеми формування інформаційної компетентності особистості. *Вісник ЛНУ імені Тараса Шевченка*. 2017. № 1 (306). С. 146–152.

174. Сіненко К. О. Сутність і зміст поняття «Інформаційно-цифрова компетентність молодшого школяра». *Інноваційна педагогіка*. 2020. № 20. С. 61–63.

175. Смирнова І. М. Формування інформаційної культури майбутніх учителів початкових класів: дис. ... канд. пед. наук: 13.00.04. Ізмаїл, 2004. 238 с.

176. Соколова I. В. Формування змісту навчання у вищому навчальному закладі: методологічні та методичні засади. *Педагогічні науки*: зб. наук. праць. Суми: СумДПУ ім. А. С. Макаренка, 2007. С. 68–77.

177. Софинская Е. Н. Формирование информационнокоммуникативной компетенции социального работника в условиях информационной образовательной среды. *Социальная политика и социология*. 2010. № 11. С. 82–92.

178. Спірін О. М. Інформаційно-комунікаційні та інформатичні компетентності як компоненти системи професійно-спеціалзованих компетентностей вчителя інформатики. *Інформаційні технології і засоби навчання*. 2009. № 5. URL: <u>http://eprints.zu.edu.ua/3733/2/09somtio.htm</u> (дата звернення: 23.09.2020).

179. Степаненко А. І. Формування інформаційної культури студентів політехнічних коледжів : дис. ... канд. пед. наук : 13.00.04. Київ, 2017. 248 с.

180. Стеценко И. А., Царева М. И. Формирование информационной компетентности студентов педагогического вуза. *Вестник Таганрогского института имени А. П. Чехова.* 2012. № 1 (спецвып.) URL: https://cyberleninka.ru/article/n/formirovanie-informatsionnoy-kompetentnosti-studentov-pedagogicheskogo-vuza/viewer (дата звернення: 09.10.2020).

181. Стратегия модернизации общего образования : материалы для разработчиков документов по модернизации общего образования / под ред. А. А. Пинского. Москва : Мир книги, 2001. 95 с.

182. Тарасенко Р. О. Теоретичне обґрунтування моделі формування інформаційної компетентності майбутніх перекладачів для аграрної галузі. Вісник Дніпропетровського університету імені Альфреда Нобеля. Серія: Педагогіка і психологія. 2014. Вип. 2(8). С. 81–86.

183. Тарасенко Р. О., Амеліна С. М. Сутність та особливості поняття «інформаційна компетентність перекладача». Духовність особистості: методологія, теорія і практика. 2013. Вип. 4. Р. 21–34. URL: https://www.researchgate.net/publication/322520005_Sutnist_ta_osoblivostipon atta_informacijna_kompetentnist_perekladaca (дата звернення: 01.04.2022).

184. Ткачов А. С. Система формування ключових компетентностей інтелектуально здібних учнів основної школи у процесі навчання суспільствознавчих предметів: автореф. дис. ... д-ра пед. наук: 13.00.09 / Ткачов Артем Сергійович; Харків. нац. пед. ун-т ім. Г. С. Сковороди. Харків, 2019. 40 с.

185. Ткачов А. С. Система формування ключових компетентностей інтелектуально здібних учнів основної школи у процесі навчання суспільствознавчих предметів: дис. ... д-ра пед. наук: 13.00.09. Харків, 2018. 587 с.

186. Ткачов А. С. Структурно-функціональна модель формування ключових компетентностей інтелектуально здібних і обдарованих учнів основної школи в процесі навчання. *Науковий вісник* : зб. наук. праць Ужгород. нац. ун-ту. Сер. : Педагогіка. Соціальна робота. Ужгород, 2017. Вип. 1 (40). С. 286–289.

187. Ткачов А. С. Формування інформаційної компетентності старшокласників у процесі навчання : дис. ... канд. пед. наук : 13.00.09. Харків, 2010. 213 с.

188. Торічний О. Формування професійної компетентності майбутніх офіцерів-прикордонників засобами проектної діяльності. Вісник Національної академії Державної прикордонної служби України. Серія: Педагогіка. 2016. Вип. 1. URL: http://nbuv.gov.ua/UJRN /znpnadpcpn_2016_1_17 (дата звернення: 06.07.2018).

189. Фенцик О. М. Роль інформаційно-комунікативної компетентності в організації науково-дослідницької діяльності фахівців з інформаційної, бібліотечної та архівної справи. *Науковий вісник Ужгородського національного університету. Серія: Педагогіка. Соціальна робота.* 2020. Вип. 2 (47). С. 199–203. URL : http://visnyk-ed.uzhnu.edu.ua/article/viewFile/218421/218069. (дата звернення : 24.11.2021).

190. Філософський словник соціальних термінів / [під заг. ред. В. П. Андрущенка]. Харків : Корвін, 2002. 672 с.

191. Формування інформаційно-комунікаційних компетентностей у контексті євроінтеграційних процесів створення інформаційного освітнього простору: посібник / О. В. Білоус та ін.; за заг. ред. В. Ю. Бикова, О. В. Овчарук. НАПН України, Ін-т інформ. технол. і засобів навч. Київ : Атіка, 2014. 212 с.

192. Харицька С. В. Пошуково-інформаційна компетентність як складова професійної компетентності майбутніх учителів. *Наукові записки НДУ ім. М Гоголя. Психолого-педагогічні науки*. 2013. № 1. С. 75–78.

193. Хоменко П. В. Формування інформаційної компетентності майбутнього фахівця фізичної культури. *Педагогічна освіта: теорія і практика*. 2013. Вип. 13. С. 158–161.

194. Хуторской А. В. Ключевые компетенции и образовательные стандарты : Доклад на Отделении философии образотворческой и теоретической педагогики. РАО 23 апреля 2005 г. Центр "Эйдос". URL: <u>www.eidos.ru/news/compet.htm</u> (дата звернення 20.05.2020).

195. Хуторской А. В. Ключевые компетенции как компонент личностно-ориентированной парадигмы образования. *Народное образование*. 2003. № 2. С. 58–64.

196. Хуторской А. В. Современная дидактика : учебн. для вузов. СПб.: Питер, 2001. 544 с.

197. Цивільний кодекс України : Кодекс України від 16.01.2003 р. № 435-IV: станом на 10 жовт. 2022 р. URL: https://zakon.rada.gov.ua /laws/show/435-15#Text (дата звернення: 23.10.2022).

198. Чала О. В. Формування краєзнавчої компетентності майбутніх географів у процесі фахової підготовки: автореф. дис. ... канд. пед. наук: 13.00.04. Старобільськ, 2021. 20 с.

199. Черкашина Л. А. Ідеї Ж.-Ж. Руссо щодо трудового виховання та соціальної ролі праці. *Гуманізм та освіта: міжнар. наук.-практ. конф.* Електронне наукове видання матеріалів конференції. URL: http://conf.vntu.edu.ua/humed/2010/txt/ Cherkashyna.php (date of access: 07.02.2022).

200. Чміль А. І., Загорний М. П. Структура і зміст інформаційної компетентності педагогічного працівника професійно-технічного навчального закладу. *Вісник післядипломної освіти*: зб. наук. пр. Ун-ту менедж. освіти НАПН України. 2011. Вип. 4 (17). С. 183–190.

201. Чумак Н. В. Пластичне самовираження людини як культурноантропологічний феномен: дис. ... канд. філос. наук: 09.00.04. Харків, 2021. 206 с.

202. Шевченко В. Л. Формула компетентності. *Народна освіта*. 2015. Вип. 2 (26). URL : <u>https://www.narodnaosvita.kiev.ua/?page_id=3246</u> (дата звернення 23.04.2021).

203. Шевченко О. О. Історія економіки та економічної думки: сучасні економічні теорії: навч. посіб. Київ: Центр учбової літератури, 2012. 280 с.

204. Шевчук Л. Структура інформаційної компетентності польських учителів. Порівняльно-педагогічні студії. 2009. № 2. С. 84–90.

205. Шестопалюк О. В. Управлінська компетентність викладача: зміст і структура. Сучасні інформаційні технології та інноваційні методики навчання в підготовці фахівців: методологія, теорія, досвід, проблеми. 2013. Вип. 34. С. 3–5.

206. Шишов С. Понятия компетенции в контексте качества образования. Дайджест педагогічних ідей та технологій. 2002. №3. С. 20–21.

207. Шишов С. Е., Кальней В. А. Школа: мониторинг качества образования. Москва, 2000. 315 с.

208. Штефан Л. В. Траєкторія формування інноваційної компетентності сучасного педагога. *Проблеми інженерно-педагогічної освіти*: зб. наук. праць. Харків : УІПА, 2015. Вип. 48–49. С. 407–413.

209. Щербань П. М. Мистецтво управління – це передусім бути чесним. *Освіта і управління*. 1998. № 4, Т. 2. С. 84.

210. Юссеф Б. Расширение доступа лиц с ограниченными возможностями к информационно-коммуникационным технологиям: опыт Туниса Бен Юссеф Тарек, Росотто Карло Мария URL: <u>https://bit.ly/2FPvruo</u> (дата звернення : 24.11.2021).

211. Яворівська М. Порівняльний аналіз понять «компетенція» і «компетентність». *Магістерський науковий вісник*. Тернопіль: Тернопільський національний педагогічний університет ім. В. Гнатюка, 2019. Вип. 32. С. 142–145.

212. Ягупов В. В., Свистун В. І. Компетентнісний підхід до підготовки фахівців у системі вищої освіти. *Наукові записки Києво-Могилянської Академії*. Київ, 2007. Т. 71. С. 3–8.

213. Adeyemon E. Integrating digital literacies into outreach services for underserved youth populations. *Reference Librarian*. 2009. Vol. 50(1). P. 85–98.

214. Allen C. R. The instructor, the man and the job: a hand book for instructors of industrial and vocational subjects. Philadelphia: J.B. Lippincott, 1919.

215. Bacon F. The Great Instauration Prooemium, Preface, Plan of the Work, and Novum Organum. Thomas Hobbes. Leviathan. John Locke. An Essay Concerning Human Locke. An Essay Concerning Human Understanding. Doubleday, 1937. 393 p.

216. Bacon F. The Great Recovery of Sciences: works in 2 vol. Vol. 1. M. : Thought, 1977.

217. Baker E. L., Choppin B. H. Minimym Competency Testing. *International Encyclopedia of Education, Research and Studies*. Oxford, 1985. P. 24.

218. Ben Youssef A., Dahmani M. The impact of ICT on student performance in higher education: direct effects, indirect effects and organisational change. *RUSC. universities and knowledge society journal.* 2008. Vol. 5, no. 1. URL: https://doi.org/10.7238/rusc.v5i1.321 (date of access: 23.10.2022).

219. Bloom B. S. Taxonomy of educational objectives: The classification of educational goals. Handbook 1: Cognitive domain. New York: Longman, Green and Co, 1956. 207 p.

220. Bonk C. J., Graham C. R. The handbook of blended learning: global perspectives, local designs. San Francisco: Jossey-Bass / Pfeiffer, 2006. 624 p.

221. Braman S. Defining information policy. *Journal of information policy*. 2011. Vol. 1. P. 1–5. URL: https://doi.org/10.5325/jinfopoli.1.2011.0001 (date of access: 19.10.2022).

222. Brier S. What is a possible ontological and epistemological framework for a true universal "information science"?: the suggestion of a cybersemiotics. *World futures*. 1997. Vol. 49, no. 3-4. P. 287–308. URL: https://doi.org/10.1080/02604027.1997.9972636 (date of access: 19.10.2022).

223. Britell J. K. Competence and excellence the search for an egalitation standart the demand for a universal guarantee. *Minimum competency achievement testing* / [Jaeger R. M., Title C. K. eds.]. Berkeley, 1980. P. 23–29.

224. Bruce C. Information literacy as a catalyst for educational change: a background paper. *Proceedings for the 3rd International lifelong learning conference*, Yeppoon. 2004. P. 8–19. URL: http://eprints.qut.edu.au /4977/1/4977_1.pdf (date of access: 04.08.2022).

225. Bykov V. Yu., Zhuk Yu. O. Theoretical and methodological principles of modeling the educational environment of modern pedagogical systems. *Problemy ta perspektyvy formuvannia natsionalnoi humanitarno-tekhnichnoi elity:* zb. nauk, N_{2} 1 (5). P. 64–76.

226. Capurro R. Contribuições para uma ontologa digital. III Colóquio Internacional de Metafísica (CIM), (20-24 de abril, 2009, Natal, Brasil, UFRN). *O que é metafísica? Atas do III Colóquio Internacional de Metafísica*. Natal: EDUFRN, 2011. P. 321–337. URL: http://www.capurro.de /ontologiadigital.html.

227. Capurro R. Foundations of information science: review and perspectives. *Rafael Capurro: German Homepage*. URL: http://www.capurro.de/tampere91.htm (date of access: 20.10.2022).

228. Capurro R. Information. Ein Beitrag zur etymologischen und ideengeschichtlichen Begründung des Informationsbegriffs. München, New York, London, Paris : Saur Verlag, 1978. 320 s.

229. Capurro R. Pasado, presente y futuro de la noción de información. I Encuentro Internacional de Expertos em Teorías de la Información – Um *enfoque inter disciplinar*. León, España, 6-7 de noviembre de 2008. Proyecto BITrum. URL: http://www.capurro.de/leon.pdf (date of access: 20.10.2022).

230. Capurro R. Past, present, and future of the concept of information. *TripleC: communication, capitalism & critique. open access journal for a global sustainable information society.* 2009. Vol. 7, no. 2. P. 125–141. URL: https://doi.org/10.31269/triplec.v7i2.113 (date of access: 20.10.2022).

231. Capurro R., Fleissner P., Hofkirchner W. Is a unified theory of information feasible? A trialogue. *World futures*. 1997. Vol. 49, no. 3-4. P. 213–234. URL: https://doi.org/10.1080/02604027.1997.9972632 (date of access: 20.10.2022).

232. Capurro R., Hjørland B. The concept of information. *Annual review of information science and technology*. 2003. Vol. 37, no. 1. P. 343–411. URL: https://doi.org/10.1002/aris.1440370109 (date of access: 19.10.2022).

233. Caravello P. S., Borah E. G., Herschman J., Mitchell E. Information Competence at UCLA: Report of a Survey Project. *UCLA Library* URL: <u>https://escholarship.org/uc/item/4v06j4z5#main</u> (date of access: 23.10.2022).

234. Chomsky N. Aspects of the theory of syntax. Cambridge (Mass.) : M.I.T. Press, 1965. P. 103.

235. Christensen C. M., Horn M. B., Staker H. Is K-12 Blended Learning Disruptive? An Introduction to the Theory of Hybrids. Clayton Christensen Institute for Disruptive Innovation. 2013. 48 p. URL: https://files.eric.ed.gov/fulltext/ED566878.pdf (date of access: 02.06.2022).

236. Chulanova O. L., Kvindt O. V., Chulanov D. V. Key (nuclear) competence management personnel to the strategic management of corporations. *European International Conference on European Science and Technology* : materials of the III international research and practice conference, Munich, Oktober 30–31, 2012. Vol. 1. Munich, Germany : Vela VerladWaldkraiburg, 2012. P. 383–388.

237. Cicero M. T. De natura deorum / ed. by A. R. Dyck. Cambridge : Cambridge University Press., 2012. 236 p. URL: https://doi.org/10.1017/CBO9780511803628 (date of access: 24.12.2021).

238. Cicero M. T. De Oratore. Vol. I. Books 1-2. Ed. by E. H. Warmington. Cambridge, Harvard University Press, 1942. 108 p.

239. Cicero M. T. Pro Archia poeta: Ein Zeugnis für den Kampf des Geistes um seine Anerkennung (Texte zur Forschung). Darmstadt: Wissenschaftliche Buchgesellschaft, 1979. 245 s.

240. Ciceronis M. T. Orator. Berlin, Weidmannsche : Buchhandlung, 1913. 228 p.

241. Cobo Romani, J. Strategies to promote the development of ecompetencies in the next generation of professionals: European and international trends (Publisher's version). ESRC Centre on Skills, Knowledge and Organisational Performance (SKOPE). 2009. URL: <u>https://ora.ox.ac.uk/objects/uuid:da0007a3-b504-4c20-858b-21dd359e3cae</u> (date of access: 08.04.2022).

242. Competency standards module (ICT competency standards for teachers) by the united nations educational / United Nations Educational, Scientific and Cultural Organization. 2008. 12 p. URL: http://www.ict-21.ch/com-ict/IMG/pdf/UNESCO_ICTcompetencystandardsforteachers.pdf.

243. Descartes R. Œuvres completes : in 11 vol. Vol. VII. / publ. par Ch. Adam et P. Tannery. Paris : Vrin, 1996. 180 p.

244. Dretske F. Knowledge and the Flow of Information. Cambridge, MA: MIT Press, 1981. 273 p.

245. Dunn K. K., Adamson D. C. Information competence in the CSU: Empowering students for personal freedom and lifelong learning. *The Cal Poly Pomona Journal of Interdisciplinary Studies*. 1997. Vol. 10. P. 101–106.

246. Eisenberg M. The big6 approach to information and technologyliteracy.SSRNelectronicjournal.2003.URL:https://doi.org/10.2139/ssrn.3424860 (date of access: 02.04.2022).

247. Eisenberg M. B., Berkowitz R. E. Information problem-solving: The Big Six Skills approach to library and information skills instruction. Norwood, N.J : Ablex Pub. Corp., 1990. 173 p.

248. Eisenberg M. B., Berkowitz R. E. The six habits of highly effective students. *School library journal*. 1995. Vol. 41 (8). P. 22–26.

249. Eisenberg M. B., Lowe C. A., Spitzer K. L. Information literacy: essential skills for the information age. 2nd ed. Westport, Connecticut : Libraries Unlimited, 2004. 408 p.

250. Etzioni A. The Active Society. New York, London : The Free Press, 1968. P. 136

251. Equal Employment Opportunity Commission, Civil Service Commission Department of Labor and Department of Justice, et al. "Uniform guidelines on employee selection procedures." Federal Register. 1978. Vol. 43(166). P. 38295–38309.

252. Flanagan J. C. The critical incident technique. *Psychological bulletin*. 1954. Vol. 51, no. 4. P. 327–358. URL: https://doi.org/10.1037/h0061470 (date of access: 20.10.2022).

253. Fleishman E. A. The description of supervisory behavior. *Journal of applied psychology*. 1953. Vol. 37, no. 1. P. 1–6. URL: https://doi.org/10.1037/h0056314 (date of access: 20.10.2022).

254. Guérin C. Cicero as user and critic of traditional rhetorical patterns: structural authority from De inuentione to De oratore. *Texts of Power, the Power of Text: Readings in Textual Authority across History and Cultures.* Homini, 2006. P. 61–85.

255. Haines V. A. Is Spencer's theory an evolutionary theory? *American Journal of Sociology*. 1988. Vol. 93. No. 5. P. 1200–1223.

256. Handbook of blended learning: global perspectives, local designs / ed by C. J. Bonk, C. R. Graham. San Francisco: Jossey-Bass, 2006.

257. Hartley R. V. L. Transmission of information1. *Bell system technical journal*. 1928. Vol. 7, no. 3. P. 535–563. URL: https://doi.org/10.1002/j.1538-7305.1928.tb01236.x (date of access: 19.10.2022).

258. Hoffmann T. The meanings of competency. *Journal of european industrial training*. 1999. Vol. 23, no. 6. P. 275–286. URL: https://doi.org/10.1108/03090599910284650 (date of access: 20.04.2022).

259. Hoge M. A., Tondora J., Marrelli A. F. The fundamentals of workforce competency: implications for behavioral health. *Administration and policy in mental health and mental health services research*. 2005. Vol. 32, no. 5-6. P. 509–531. URL: https://doi.org/10.1007/s10488-005-3263-1 (date of access: 20.10.2021).

260. Horton S. Introduction – the competency movement: its origins and impact on the public sector. *International journal of public sector management*. 2000. Vol. 13, no. 4. P. 306–318. URL: https://doi.org/10.1108/09513550010350283 (date of access: 20.10.2021).

261. Hutmacher W. Key competencies for Europe. *Reportof the Symposium* (Berne, Switzerland 27–30 March, 1996) / Council for Cultural Cooperation. Strasburg, 1997.

262. Johnson H. C. Jr. Teacher competence: A history analysis. *Competence: Inquiries into its meaning and acquisition in educational settings* /ed. by E. C. Short, Lanham, MD : University Press of America. 1984. P. 41–70.

263. King L. Information literacy of incoming undergraduate Arts students at the University of the Western Cape: assessment of competencies and proficiencies : Thesis and dissertation. 2007. URL: http://etd.uwc.ac.za/index.php?module=etd&action=viewtitle&id=gen 8Srv25Nme4_6777_1216992391 (date of access: 23.10.2021).
264. Kogut B., Zander U. Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology. *Organization Science*. 1992. Vol. 3. № 3. P. 383–397.

265. Krumsvik R. Situated learning and teachers' digital competence. *Education and Information Technologies*. 2008. Vol. 13(4). P. 279–290.

266. Krumsvik R. J. Teacher educators' digital competence. *Scandinavian Journal of Educational Research*. 2014. Vol. 58(3). P. 269–280.

267. Kurian G. The AMA dictionary of business and management. Amacom, 2013. P. 36

268. Lau J. Guidelines on information literacy for lifelong learning. Boca del Río, Veracruz, México, 2006. 60 p. URL: http://www.ifla.org/files/information-literacy/publications/ifla-guidelines-en.pdf (date of access: 02.04.2022).

269. Luchaninov V. D., Bazhenov R. I., Shtepa Y. P., Kazinets V. A. Student Information Competence under Conditions of the Realization of Interactive Pedagogical Interaction. *Global Media Journal*. 2016. URL: <u>http://www.globalmediajournal.com/open-access/studentinformation-</u>

competence-under-conditions-of-the-realization-ofinteractive-

pedagogicalinteraction.php?aid=72849 (date of access: 08.04.2022).

270. Machlup F. The production and distribution of knowledge in the United States. Princeton: Princeton University Press, 1962. 416 p.

271. Margel S. Le tombeau du Dieu artisan: Sur Platon. Paris: Editions de Minuit, 1995. 204 p.

272. McClelland D. C. A Guide to Job Competency Assessment. Boston: Mc Ber, 1974. 381 p.

273. McClelland D. C. Testing for competence rather than for intelligence. *American Psychologist*. 1973. № 28. P. 1–14.

274. McKinney L. Різниця між інформацією та знаннями (з таблицею порівняння) – Бізнес-2022. living-in-belgium. URL: https://uk.living-in-

108

belgium.com/difference-between-information-and-knowledge-246 (дата звернення: 23.10.2022).

275. Minyar-Beloroucheva A., Sergienko P. Competences development within L2 PR undergraduates education in the Digital Age. *Revista amazonia investiga*. 2022. Vol. 11, no. 50. P. 282–289. URL: <u>https://doi.org/10.34069/ai/2022.50.02.26</u> (date of access: 23.11.2021).

276. Moore D., Cheng M., Dainty A. Competence, competency and competencies: performance assessment in organisations. *Work Study*. 2002. Vol. 51. No. 6. P. 314–319.

277. National Skill Standards Act of 1994, Sec. 502. 1994.

278. Neumann W. Educational responses to the concern for proficiency. *A collection of readingsrelated to competency based training*. Victoria (Australia): Deakin University, 1994. P. 91–112.

279. New Webster's Dictionary and Thesaurus of the English language: Lexicon Publication, 1993. – 1150 p.

280. Nonaka I., Takeuchi H. The Knowledge – Creating Company: How Japanese Companies Create the Dynamics of Innovation. N.Y., 1995. 284 p.

281. Norris N. The Trouble with Competence. *Cambridge Journal of Education*. 1991. Vol. 21. Issue 3. P. 331–341.

282. Parry S. B. The quest for competencies: competency studies can help you make HR decision, but the results are only as good as the study. *Training*. 1996. Vol. 33. P. 48–56.

283. Peirce C. S. Collected papers of charles sanders peirce. Vol. V and VI: *Pragmatism and pragmaticism and scientific metaphysics*. Belknap Press, 1974. 944 p.

284. Peters J. D. Information: notes toward a critical history. Journal of communication inquiry. 1988. Vol. 12, no. 2. P. 9–23. URL: https://doi.org/10.1177/019685998801200202 (date of access: 20.10.2021).

285. Pinkaers S. La voie spirituelle du bonheur selon Saint Thomas. *Ordo sapientiae et amoris:* Image et message de saint Thomas d'Aquin à travers les récentes études historiques, herméneutiques et doctrinales: hommage au professeur Jean-Pierre Torrell OP à l'occasion de son 65e anniversaire. Fribourg, Suisse : Editions universitaires, 1993. P. 284.

286. Porat M., Rubin M. The Information Economy: Development and Measurement. Washington : Scientific Review, 1978. 128 p.

287. Qvortrup L. The controversy over the concept of information. *Cybernetics & Human Knowing*. 1993. Vol.1 (4), P. 3–24.

288. Rainie L., Purcell K., Smith A. The social side of the Internet. Pew Research Centre. 2011. URL: <u>https://www.pewresearch.org/internet/wp-content/uploads/sites/9/media/Files/Reports/2011/PIP_Social_Side_of_the_Internet.pdf</u> (date of access: 16.05.2022).

289. Robredo J. Filosofia e informação? Reflexões. *Revista iberoamericana de ciência da informação*. 2012. Vol. 4, no. 2. P. 1–39. URL: https://doi.org/10.26512/rici.v4.n2.2011.1671 (date of access: 20.03.2022).

290. Rotherham A. J., Willingham D. T. "21st-Century" Skills: Not New, but a Worthy Challenge. *American Educator*. 2010. Vol. 34, no 1. P. 17–20.

291. Salganik L. H. Competencies for Life: A Conceptual and Empirical Challenge. *Defining and Selecting Key Competencies* / ed. by S. Rychen, L. H. Salganik. Göttingen, Germany : Hogrefe & Huber. 2001. P. 17–32.

292. Scott C. The Futures of Learning 3: What kind of pedagogies for the 21st century? *UNESCO Education Research and Foresight*, Paris. ERF Working Papers Series, No. 15. URL: https://unesdoc.unesco.org/ark:/48223/pf0000243126 (date of access: 01.04.2022).

293. Shannon C. A Symbolic Analysis of Relay and Switching Circuits. *Transactions of the American Institute of Electrical Engineers – IEEE*, 1938. Vol. 57, Iss. 12. P. 713–723.

110

294. Shannon C. E. A mathematical theory of communication. *Bell system technical journal.* 1948. Vol. 27, no. 3. P. 379–423. URL: https://doi.org/10.1002/j.1538-7305.1948.tb01338.x (date of access: 20.10.2021).

295. Shannon C. E., Weave W. The mathematical theory of communication. Urbana: the university of Illinois press, 1964. 125 p.

296. Shenton A. K. Information literacy and scholarly investigation: a british perspective. *IFLA journal*. 2009. Vol. 35, no. 3. P. 226–231. URL: https://doi.org/10.1177/0340035209346219 (date of access: 20.01.2022).

297. Spencer H. The principles of sociology : in three volumes. Vol. 1. New York: D Appleton & Company, 1879. URL: https://doi.org/10.1037/14123-000 (date of access: 20.10.2022).

298. Spencer H. The principles of sociology: in three volumes. Vol. 3. New York : D. Appleton and Company, 1898. 469 p.

299. Spencer S. M., Spencer L. M. Competence at work: models for Superior Performance. New York : John Wiley & Sons, 1993.

300. Teodorescu T. Competence versus competency: What is the difference? *Performance Improvement*. 2006. Vol. 45. Issue 10. P. 27–30.

301. The Concise Oxford English – Russian Dictionary / ed. by Paul Falla. Oxford : Oxford University Press, 2001. 1007 p.

302. The practice of competency modeling / J. S. Shippmann et al. *Personnel psychology*. 2000. Vol. 53, no. 3. P. 703–740. URL: https://doi.org/10.1111/j.1744-6570.2000.tb00220.x (date of access: 20.10.2022).

303. Thesaurus linguae latinae. *BAdW* · *Publikationen*. URL: https://publikationen.badw.de/de/thesaurus/lemmata (date of access: 20.10.2021).

304. Thomas N. P. Information literacy and information skills instruction: applying research to practice in the school library media center. 2nd ed. Westport, Conn: Libraries Unlimited, 2004. 225 p.

305. Turusheva L. Students' information competence and its importance for life-long education. *Problems of Education in the 21st Century*. Vol. 12. P. 126–132. URL : <u>http://oaji.net/articles/2014/457-1393267313.pdf</u> (date of access: 08.04.2022).

306. Tuxworth E. Competence based education and training: Background and origins. *Competency based education and training* / ed. by J. Burke. Routledge, 1989. P. 9–22. URL: https://doi.org/10.4324/9780203974261 (date of access: 20.10.2022).

307. Vreeken A. The History of Information: Lessons for Information Management. 2005. URL: <u>https://www.researchgate.net/profile/Arjan-Vreeken-2/publication/279641557_The_History_of_Information_Lessons_for_</u> <u>Information_Management/links/6140c2b497d4d7602075f27c/The-History-of-</u> <u>Information-Lessons-for-Information-Management.pdf</u> (date of access: 20.10.2021).

308. Webber S. Information literacy standards and statements, 2006. URL: <u>http://dis.shef.ac.uk/literacy/standards.htm</u> (date of access: 02.06.2021).

309. Weizsäcker C. F. von Vorträge. Information und Imagination. *Bayerische Akademie der Schönen Künste*. München : Piper, 1973. S. 11–32.

310. Whiddett S., Hollyforde S. A. A practical guide to competencies: how to enhance individual and organisational performance. 2nd ed. London : Chartered Institute of Personnel and Development, 2003. 144 p.

311. White R. W. Motivation reconsidered: the concept of competence. *Psychological review*. 1959. Vol. 66, no. 5. P. 297–333. URL: https://doi.org/10.1037/h0040934 (date of access: 09.09.2022).

312. Wiener N. Cybernetics or Control and Communication in the Animal and the Machine. New York: John Wiley & Sons / Technology Press, 1948. 194 p.

313. Wilcox Y. An Initial Study to Develop Instruments and Validate the Essential Competencies for Program Evaluators (ECPE): a dissertation submitted to the faculty of the graduate school of the university of Minnesota. Yuanjing Wilcox, 2012. 149 p.

314. Wilson L. A. Information literacy: fluency across and beyond the university. *Library User Education: Powerful learning, powerful partnership* / ed. by B. I. Dewey. Lanham, MD : Scarecrow Press, Inc., 2001. P. 1–17.

315. Wolf's S., Brush T., Saye J. The big six information skills as a metacognitive scaffold: a case study. *School library media research*. 2003. Vol. 6.URL:https://www.ala.org/aasl/sites/ala.org.aasl/files/content/aaslpubsand journals/slr/vol6/SLMR_BigSixInfoSkills_V6.pdf (date of access: 02.06.2021).

CHAPTER 2

CONCEPTUAL FOUNDATIONS OF INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS

2.1 Methodological approaches to the study of the problem of information competence formation in international medical students

The study of the problem of the formation of information competence of foreign students of medical specialties involves grounding the methodological basis of the study, which is based on appropriate methodological approaches.

Under the scientific methodology (from the Greek. methodos and logos) the doctrine of the principles, forms and methods of scientific knowledge is understood [179; 25; 201; 65].

Scientific and pedagogical literature interprets the concept of "methodology" as:

– systems of principles that determine the choice, features and sequence of application of certain methods, means, methods of research to ensure high objectivity of the data obtained regarding the nature, content, patterns of processes and phenomena studied;

a set of methods, research methods used in a particular scientific field;

defined algorithm of action, plan for the study of a certain problem,
trajectory of scientific knowledge [34; 179; 25; 201; 65].

In the context of the research methodology, methodology is defined by the system of knowledge, a set of general principles of cognition, ways, methods, ways of implementing research and transforming the processes, phenomena under study, etc.

The essence of the methodology is revealed in its tasks, which include:

- defining the object and subject of study;

– problem statement;

- grounding or constructing, determination of the nomenclature of theoretical and practical methods of scientific research;

development of a special trajectory of research work aimed at the implementation of a specific research goal;

providing objective, comprehensive, complete information about the studied phenomena, processes, etc.;

 formation of scientific and theoretical base and analytical research tools based on reliable, objective facts;

- enrichment of terminological, scientific and theoretical research base;

- analysis of the results obtained, their significance and reliability [179; 25; 201; 65].

In connection with the intensive development of pedagogical science, the need for theoretical development and practical implementation of topical issues in the field of education, pedagogical methodology has been singled out, from the standpoint of which certain phenomena, events of the educational process are considered, their laws and features are determined. The methodology of pedagogy is based on the following principles:

– objectivity – involves taking into account a set of factors affecting the object of study, the conditions for the implementation and development of the processes under study, ensuring that the selection of approaches and research methods meets the requirements for obtaining objective, complete, detailed information;

evidence – involves the analysis of all alternative solutions to the problem and the choice of the most effective ways to solve it;

115

comprehensiveness – requires to investigate a specific phenomenon,
process in the context of connections and interaction with other phenomena,
processes, conditions, factors that affect its nature, content, determine its
features;

 essential analysis – requires the selection in the process of research of a general and single, deep understanding of the essence of the studied phenomena and processes, features of the development of certain pedagogical processes, development prospects;

unity of logical and historical – requires taking into account the peculiarities of the formation and development of the object of study, designing the prospects for its development [185; 179];

Summarizing the conclusions of scientists regarding the essence, content of the scientific methodology, it was concluded that it is implemented by the following main functions:

- development of new and improvement of existing theories, provisions, hypotheses;

– application of the acquired new knowledge in practice.

The study found that the methodology, being complex in its content and category, includes the following four levels:

1. Philosophical – the formation of the researcher's worldview takes place, at this level the analysis and interpretation of the phenomena under study is carried out according to the laws, principles of knowledge in the context of understanding their general scientific significance, determining their place in the general system of philosophical knowledge.

At this level, the methodology for studying the formation of information competence of foreign students of medical specialties in the educational environment of the university will provide a definition of a general strategy for studying the chosen problem, taking into account the basic laws of dialectics (the law of unity and struggle of opposites, the law of mutual transition of

quantitative and qualitative changes, the law of neglecting negation), connection with the main categories of dialectics (being, matter, development, contradiction, space, time, quality, quantity, general and singular, form, content, cause, consequence, necessity, randomness, system, element, etc.) in accordance with their features (objectivity, mobility, universality, connection with practice) [185; 179; 182; 194; 5; 41].

2. General scientific – at this level, research is carried out on the basis of taking into account theories, concepts, provisions, substantiated and accepted by those most scientific fields [185; 179; 25; 201; 182].

3. Specifically scientific – at this level, methods, techniques, means of research inherent in a particular scientific field, specific science are used [25; 182; 194; 5; 41].

4. Technical – at this level, the procedure for organizing and conducting a specific study (methods, standards, instructions, etc.) is drawn up and worked out directly [185; 5; 25, 201, 65].

An effective tool of scientific methodology is an approach that is interpreted as a certain methodological position, on the basis of which a certain object is studied and investigated. Today pedagogical science has a wide range of approaches, each of which has its own tasks, functions, and determines its logics and strategy of research. The choice of methodological approaches is determined by: priorities of science development, the purpose and objectives of the study, the features of the phenomenon under study.

The scientific and methodological basis for the study of the formation of information competence of foreign students of medical universities at the philosophical level is made up by system-synergistic, culture-based and axiological approaches. General scientific level of the research is presented by competence-oriented, personality and activity-oriented, environment-based approaches. Specifically-scientific level of the research was realized by hermeneutic and context-oriented approaches. Let us describe each of them in more detail.

2.1.1 The role of the system-synergistic, culture-based, axiological approaches in the study of the problem of information competence formation in international medical students

In the process of scientific research, it was found that the *system-synergistic* approach is a kind of symbiosis of systemic and synergistic approaches and is implemented on the basis of a synthesized analysis of the main provisions of the theory of systems and synergetics.

So, the basic approach of scientific and pedagogical research is systemic. The generalization of the works of scientists on the methodological significance of the application of this approach made it possible to single out its main characteristics:

neutralizes the manifestations of subjectivism, randomness, spontaneity of scientific knowledge;

creates conditions for consistent, structured, organized scientific research;

allows one to analyze the phenomenon under study as an integral system, to present a complete and objective scientific picture;

any complex phenomenon, the process becomes available for research due to the possibility of differentiating it into simpler components [30; 139; 100; 219].

As the study of scientific and pedagogical literature on this problem has shown, a systematic approach involves consideration and comprehensive analysis of any object of study as a specific system, namely, its structure, methods of organization, internal and external hierarchy of construction of its elements, the nature of interconnections, system-forming factors, systemic and

qualitative characteristics of its components, etc. [100; 141; 62; 59]. As. S. Lisova, Y. Shabanov clarify, from the standpoint of a system approach, the object of study is defined in a holistic process and is studied as a certain system that combines a complex of separate, interrelated elements with its structure and a set of connections with the external environment [219; 108].

The system approach is a complex combination of analytical techniques, rules of scientific research. Thus, O. Kustovska notes that the system approach cannot be represented in the form of a clear, consistent algorithm of actions, since its essence lies in the implementation of heuristic functions and cannot be limited to certain standards and methods [100, p. 7].

In the scientific literature, some authors offer broader definitions. For example N. Samborska discloses the essence of a system approach through the complex of such characteristics of a system:

- the system unites a certain number of individual elements that are inextricably linked and determine its integrity;

the number of these elements affects the characteristics of the entire system;

- the system is a complex object in its organization, has a certain set of subsystems in its structure [174, p. 100].

Konversky considers the systematic approach as a set of methodological requirements for the analysis of the object of study as a system, namely:

 the properties of each element of the system are determined by its place in its structure, the nature of the connections and the functions that it implements in the system;

 the set of elements of the system does not determine the properties of the entire system;

 the characteristics of the system are influenced by the features of the elements that it combines and the specifics of its structure;

- the system is in interaction with the environment;

- each system has its own, unique hierarchy of components;

- the study requires a thorough and comprehensive study of the system;

– each system is dynamic in nature and is constantly evolving [141, p.

33].

So, summarizing the conclusions of scientists, it can be stated that the basic concept of a systematic approach is a "system".

In the scientific and pedagogical literature system (from the Greek. systema – combination, union of individual parts, addition) is defined as an objective, integral set of interrelated elements (objects, facts, processes, phenomena, knowledge) and their properties [100; 141; 62; 82; 216; 217].

According to the conclusions of A. Konversky, the system can qualitatively change the properties of its components, adapt them to its essence, features, character and content. The consequence of this is either the strengthening of certain properties of the elements of the system, or the leveling of certain properties, or the acquisition of significantly new properties. At the same time, the new properties of the elements of the system in their totality correspond to higher rates compared to the sum of the properties of individual elements of the system [141, p. 10].

So, the application of a systematic approach in pedagogical research allows us to obtain objective information about a particular system, its structure and composition, the components that it combines, and the functions that the system implements.

As it was stated in the process of research, the successful implementation of a systematic approach requires compliance with the principles defined by modern science:

 principles of the general goal – the functioning of both the entire system and its individual components is subordinated to the achievement of a certain goal;

– principles of unity – the system is a whole, stable formation;

principles of connectedness – all components of the system are interconnected by certain relationships, interactions;

 a principle of hierarchy – the definition in the system of relations and levels that determine their hierarchy;

principles of functionality – determination of the functions of the system and its components, study of the system in accordance with the implementation of these functions;

a principle of development – the ability to self-improve the system of positive dynamics of its properties;

- a principle of decentralization – the system is able to adapt to external conditions, is flexible, mobile;

 a principle of uncertainty – each system may have unknown, unexplored, unpredictable properties and random nature of the course of certain processes [100, p. 10-12].

In the course of scientific research, it was found that the use of a systematic approach in the study of pedagogical phenomena and processes has significant advantages, since it contributes to:

1. Formation and development in the researcher of a "special systemic type of thinking" [181, p. 10].

2. Possibilities of system analysis of the studied pedagogical phenomenon, taking into account the potential and features of the influence of all structural elements and connections on the object of study, the results of the pedagogical process. Thus, M. Samborskaya identified the basic requirements for the implementation of system analysis: the study of the system as an integral

phenomenon, a detailed analysis of each of its components, analysis of the connections and relationships between them, taking into account the features of its functioning in spatial and temporal dimensions [174, p.100].

3. Defining a complex of system-forming connections that determine the features of the functioning and development of the phenomenon under study.

4. Formation of the hierarchy of phenomena, their characteristics (stability, durability) of the pedagogical system [151, p. 245].

5. Updating the content of education, improvement of the organization of the educational process as a whole in accordance with the tasks set, goal, expected result [181; 172].

6. Determining the role of specific components and their connections of the pedagogical system to achieve the goal [181; 172].

These conclusions of scientists on the possibilities of a systematic approach to the study of certain aspects of the educational process of higher education institutions became these conclusions for the study. Considering education as a complex, dynamic system, scientists identify the following components that are part of its structure and determine its features: the goal of education, the content of education; practical ways of activity aimed at realizing the goal; organizational forms of the educational process; holistic educational process as integration of the educational, educational and developmental components; subjects and objects of the education process; educational space; real results of the education process [219; 70; 111; 39; 128].

It is worth noting the works in which the application of a systematic approach to the formation of competencies of applicants for higher education is presented. Thus, O. Berezyuk, based on the scientific work of I. Zymnya, presents competence as a system that combines the following components: willingness to realize a certain competence, possession of a set of relevant knowledge, experience in the implementation of this competence, a positive

attitude to the content of competence and the field of its implementation, emotional and volitional opportunities for the realization of competence [9, p. 200].

V. Zhuravskyi draws attention to such a component of the education system as the learning process and identifies specific stages of implementation of a systematic approach to its organization and implementation: determining the goals and objectives of training in accordance with current educational needs, developing a training course and educational and methodological complex for it; trial implementation of the course in practice; implementation of the course in the educational process; analysis of the results [69].

The ideas of O. Tortomina, which indicate the need to take into account the influence of the subjects of educational activity on functioning of the educational system, were useful. Skills of methodological, creative, scientific activity, are also considered as a certain autonomous system [215].

In the course of the scientific research, it was found that a separate, autonomous system with the corresponding characteristics is also the identity of the applicant as a subject of study. O. Bilous, O. Marushchak, Y. Vintyuk note that students are active participants in the educational process, independently set their own goals and rebuild the strategy of their achievement, in accordance with individual and personal characteristics, motivation, and professional interests [30; 19; 122].

The system approach is logically related to the synergistic approach. As it is known, synergetics (from grec. joint action, cooperation) is a science that studies the laws of processes and phenomena based on the laws of self-organization [82, p. 68].

The founder of the theory of synergetics G. Haken noted that the result of the interaction of a large number of subsystems is the emergence at the macro level of a new structure and with the properties of self-organization [206, p. 7].

In modern studies, attention is focused on such aspects of synergetics as the emergence of fundamentally new systems, the transition from disorder to orderliness, diagnosed in complex, open, nonlinear systems that are in a state of constant change and development and occurs due to their ability to selforganize. For example, E. Karpova, based on the conclusions of O. Knyazeva and V. Gracheva, characterizes synergistics as a science that studies the processes of transition from an disordered to an ordered state in complex systems [84, p. 99]. N. Linnik, P. Zanadruk note that synergetics from the standpoint of self-organization as properties of a complex system and its components considers the processes of emergence and development of fundamentally new structures, both material and spiritual, which contributes to the foundations for building a new picture of the world [107, p. 84].

S. Kalambet, S. Ivanov, Y. Pivnyak also define synergistics as a scientific direction on the development of the system, changes in its qualities and structure. Researchers reasonably argue that synergetics studies and explains the transformation of the old properties of the system into new ones, the transformation of quantitative changes into fundamentally new parameters in accordance with the theory of bifurcations [82, p. 69].

The study of scientific and pedagogical literature made it possible to identify the main provisions of the methodology of synergetics:

- synergistic system is capable of self-organization, self-development and evolution, due to interaction with the external environment and between the components of the system itself, modernization, renewal, transformation of the system can take place;

 for complex systems it is impossible to determine the algorithm and direction of development, it is possible only through the organization of external influences to create conditions for self-development and self-organization of the system;

- the condition for the development of the system is its instability;

- chaos entails the search for ways to stabilize, that is, it acts as a constructive and creative factor in the development of the system;

- the development of complex systems can occur in several ways;

- the development of the system is determined by the theory of bifurcation, according to which the system in its development moves from a state of stability to a state of chaos, the exit from which (being at a critical point, point of bifurcation) and acts as a powerful factor in self-development and determines the directions of its self-organization;

 clarification of the laws of the processes of self-organization of a particular system makes it possible to influence its development, accelerate it;

system management is possible only at the stage of transition from stability to chaos (bifurcation point) [82; 107; 112; 118; 193; 212; 135; 84; 116].

The application and widespread use of the synergistic approach in scientific research has stable advantages and expressed methodological value, namely:

 contributes to the formation of a broad picture of the world among the researcher, the ability to interpret the phenomena under study, events in the context of complex dynamic processes;

 allows one to determine the essence, content, features of selforganization processes that determine the specifics of the functioning and transformations of open, nonlinear, unstable systems;

helps to analyze the studied phenomenon, process in the context of interdisciplinary connections and scales;

- contributes to the formation of new ideological positions, a new understanding of the problem through the study and comprehension of patterns, principles, features of the processes of self-organization and evolution of complex systems [82; 107; 193; 212; 32].

125

It is necessary to dwell separately on the scientific significance of using a synergistic approach precisely in the organization and conduct of pedagogical research. In modern scientific and pedagogical works, scientists unanimously emphasize the advantages of the methodology of the synergistic approach. For example, V. Lutai, emphasizing the special importance of implementing a synergistic approach, emphasized that from the standpoint of this approach it is possible to level the contradictions that are very acute for the educational community: between authoritarian and free style of building relationships in the educational space, etc. [116, p. 100]. Similar opinions are expressed by M. Ovchinnikova, she focuses on the fact that the synergistic approach allows:

- to solve actual problems of education that have arisen as a result of the contradiction between authoritarian and democratic types of pedagogical leadership, personal-centrist and non-centrist directions of pedagogical activity;

harmonize and level inconsistencies between the theories of heredity,
upbringing, personality formation [135, p. 263].

E. Karpova determines the following advantages of using a synergistic approach in scientific and pedagogical research:

1. Allows from the standpoint of "new nonlinear" thinking, worldview to find fundamentally new aspects in pedagogical theory and practice, to give new content to traditional categories and ideas.

2. Promotes an effective search for internal resources, potentials for the development of research objects (systems) [84, c. 99].

According to E. Karpova, the implementation of a synergistic approach in pedagogical scientific research requires considering the phenomenon under study, the process as an open, nonlinear system, with stable manifestations of self-organization. personality will be effective only if it correlates with its internal attitudes, principles, beliefs, logic of behavior, etc. [84].

The scientist identified a number of basic provisions for the implementation of the synergistic approach:

 education is a complex system that combines interrelated heterogeneous components, their interaction determines the integrity of the system;

education as a system is a component of more complex systems that operate in society;

 education is an open system, it interacts with the external environment, is influenced by its social factors and processes, as a result of which its information, human, material indicators change;

- education is an unbalanced system, which is caused by a number of contradictions: between the requirements of classical, established, crystallized by the historical development of cultural traditions and the needs of modern challenges, dynamic processes of the sociocultural space; between the need to significantly modernize and update the educational process and the need to ensure uniform requirements for the content, results of the educational process, regulated by educational standards; between the needs of individual development of the individual, in accordance with its inclinations, interests, abilities and a unified system for evaluating learning outcomes;

- education is a nonlinear system, changes and the vector of development can not always be clearly defined, and both the whole system and its components may have several variations [84, p. 101].

So, the ideas of synergetics significantly expand the possibilities of improving pedagogical theory and practice, bringing scientific research to a qualitatively new level. As V. Kremen notes, the application of the achievements of synergetics determines fundamentally new positions in the development of issues of building pedagogical systems and improving various aspects of the pedagogical process, focusing on self-development, selforganization, co-creation [98, p. 4-9]. It is quite logical to reflect the requirements of the synergistic approach in the National Strategy for the Development of Education, which indicates the need to take into account the influences and results of the interaction of such related environments: personal, informational, educational, ethnic, sociocultural ones, etc. [157, p. 28].

The conclusions of I. Zyazyun are significant in the context of the problem raised. He identified the following priority areas for the application of the ideas of synergetics in pedagogy:

- supplementing the content of education with pedagogically adapted ideas of the theory of synergetics;

 modernization of educational and educational systems, forecasting their development taking into account the achievements of synergistic science;

 organization of management and management at different stages of the pedagogical process in accordance with the laws of synergetics [74; 75, p. 451].

Analysis and generalization of scientific and pedagogical literature allowed us to conclude that the study of the problem of forming the information competence of foreign students of medical specialties in the educational space of the university requires the use of a system-synergistic approach, as it integrates basic ideas with the system and synergistic approaches and makes it possible to take them into account comprehensively in the implementation of the study.

So, based on the conceptual provisions of the system-synergistic approach, in the process of conducting the study they relied on the following ideas:

1. In the research and the process of formation of information competencies of foreign students of medical specialties, it is necessary to take into account the presence of a significant number of multilevel systems that affect this pedagogical phenomenon. Particular attention should be paid to the systems functioning within the educational environment of the university: system of education, system of learning of the educational establishment, system of competencies, subjects and objects of the educational process as autonomous systems, medical training system, etc.

2. The development of the process of formation of information competence of foreign students of medical specialties as a synergistic system is ensured by interaction with its components and connections, as well as with systems of different levels, in the plane of which the phenomenon under study is manifested.

3. It is quite logical to study, improve and update the existing network of horizontal and vertical connections and ways of interacting with multi-level systems within the university space to ensure the success of the process of forming information competence.

4. The priority tasks of the teacher are to ensure constructive interaction in all autonomous systems and the choice of the optimal combination of their influences as promising to ensure the result.

The methodological base of the study of the formation of information competence of foreign students of medical specialties also includes a cultural approach. From the standpoint *of the culture-based* approach, education is closely connected with the phenomenon of culture, in which established knowledge about society, the universe, man, the system of attitudes to the world around us, emotional and moral ideas, etc. crystallized [1, p. 7].

In the reference literature, the concept of "culture" is defined as:

- an industry that accumulates and reflects the spiritual heritage of mankind, the community as a whole [63, p. 439];

a phenomenon that helps a person to adapt to social life, to take an active social position, to be realized in the professional and practical sphere [199, p. 19];

- a national spiritual phenomenon that took shape as a result of the historical development of mankind, and as a characteristic of a particular person, carrier of the value system, attitudes of beliefs [7; 5; 41].

It should be noted that the scientific literature presents a fairly wide range of definitions of this concept:

– a complex of values of a material or spiritual nature;

– a special type of human activity;

- the way, process and result of the creative realization of the individual, the manifestation of his abilities and interests [136, p.41].

Noteworthy is the study of O. Bovanenko, who, based on the works of A. Kröber and K. Clackho, presented the main groups of definitions of the concept of culture, structured them as follows:

1. Definition of descriptive nature – culture is interpreted as a broad concept that unites a complex of norms, principles, attitudes, values that have developed in various activities and creativity of a person, are reflected in religion, art, folk art, culture, ethics, etc. this is the quintessence of the achievements of mankind, the results of its interaction with the social and natural environment, which was formed throughout its development.

2. Definition of historical character – culture is interpreted as a set of spiritual achievements of mankind, which have been exposed and stylized throughout historical development and are represented by a wide arsenal of folk traditions, creativity, rituals, customs that reflect moral views and beliefs, beliefs of the people and are broadcasted to future generations.

3. Definition of normative nature – culture is interpreted as a set of rules, norms of behavior, dogmas that regulate human life and in society.

4. Definition of value character – culture is interpreted as a system of spiritual and material values of a person or a social group of people.

5. Definition of psychological character – culture is interpreted as a mechanism that helps a person to successfully communicate and act in society, to solve problems of interpersonal interaction.

6. Definition of structural nature – culture is interpreted as a set of defined, interrelated spiritual and material characteristics that represent certain patterns of behavior.

7. Definition of pedagogical character – culture is interpreted as a system of beliefs, attitudes, behavioral skills that were formed as a result of specially organized activities and communication with the individual [20; 97].

The appeal to the cultural approach is associated with the need to solve urgent problems in the field of education, which are currently determined as priority. Today, a crisis of humanization of all aspects of public life is being diagnosed. The development of information technologies, quarantine measures have determined the dominance of personified models of social behavior, social life, and professional human activity. That is, human activity proceeds according to the projection of socially active formats, interaction with other people, with objects of culture, nature, spiritual achievements of mankind, etc. This trend can be traced in the educational field. As it is known, education faces such a priority task – training of highly qualified professionals, which led to a shift in emphasis on narrow-profile training of future specialists. So all the aspects of social life lack general, mutually enriching and complementary communication, system-making cultural co-operation. Attempts to level the consequences of education dehumanization conditioned the expediency of introducing more disciplines of the humanitarian cycle. The lack of logical, meaningful connections between them fundamentally did not change the situation. So the scientific and pedagogical community consider the culturebased approach an effective means of humanizing both an educational sphere and the society in general [1; 2; 5; 41; 86; 124].

It should be noted that there is a certain inconsistency concerning the definition of the concept of a culture-based approach among scientists, because in different sources the attention of scientists is focused on various aspects of its content, in particular the following:

- the culture-based approach is based on the principle of cultural conformity, which determines the filling of education with spiritual content that has been accumulated by mankind throughout the history of its development [7, p. 171];

- the focus is on a person, a sovereign and active person who manifests himself, his attitudes, values and position through interaction with cultural objects. The cultural approach involves the study of the individual as a carrier of a certain cultural model, its cultural meanings and programs implemented by it in sociocultural activities. A person is considered as a subject of culture, his cultural integrity is provided by a hierarchy of personal qualities, traits, characteristics (morality, spirituality, creativity, self-awareness, etc.). At the same time, each person carries out his own cultural personal development, assimilates the cultural experience of mankind, creates his own personal world of culture [7; 44];

- the object of study is considered as a certain cultural phenomenon, cultural phenomenon, process or part of it and is studied in the context of sociocultural processes, features of their development and formation [44, p. 12];

- a culture-based approach involves the implementation of systematic, consistent, organized pedagogical activity, which is aimed at forming in the individual a stable system of values, attitudes, beliefs, methods of activity and behavior that meet the norms of human culture [5, p.104].

The following conclusions of V. Gryniova regarding the semantic introduction of culture-based approach into the educational field had a significant investment for the study:

1. personal development (self-realization, self-improvement) occurs through the organization of cultural activities and communication, the creation of conditions for the formation of the experience of creativity in cultural activities, the expansion of the communication sphere of the individual;

132

2. the process of improvement of the pedagogical process, its tools involves the enrichment of its content with value meanings, cultural context;

3. there is a need for an increase in the cultural level of education in general, for perfection of all its individual substantive and operational components [44, p. 10].

In the process of scientific research, it was found that the application of the culture-based approach in pedagogical activity significantly increases the arsenal of functions of the teacher. So, based on scientific research of various aspects of a culture-based approach and culture study in general, V. Gryniova and K. Gnatovska defined such functions of a teacher:

1. Information – is realized through the use by the teacher of cultural analysis, the presentation of educational material in the context of its historical significance, the presentation of new ideas and facts in the perspective of their development and scientific evolution. This promotes the formation of a special culture-based thinking of students and enriches their intellectual sphere. For the teacher realization of information function requires deep encyclopedic knowledge, intellectual flexibility, mastering and confident usage of a wide range of information which goes beyond the projection of narrow specialization.

2. Developmental – is realized through the actualization of the cognitive activity of students, their mental interests.

3. Orientation – is realized through the formation of value systems, attitudes of students to the outside world and other people.

4. Mobilization – is realized through the formation of the students' ability to accumulate the knowledge gained about sociocultural phenomena and processes for solving practical problems, to transfer the acquired skills to a fundamentally new sociocultural activity, the ability to independently carry out educational and research activities.

5. Constructive – is realized through the formation in students the skills to convert cultural information into educational material, to select and

constructively use information about cultural phenomena and processes in the study of a particular topic, to form cultural connections between facts, events, phenomena in a certain scientific field, to systematize the knowledge gained in accordance with the requirements of cultural integrity.

6. Communicative – implemented through the formation of communication skills, transcultural communication. The teacher must demonstrate a high level of cultural communication, present, create conditions for the development of cultural communication skills among students.

7. Organizational – is realized through the creation of conditions for the sociocultural adaptation of students, the formation of an active public position in them, the promotion of students' assimilation of cultural achievements through a wide arsenal of forms and methods of educational, educational, organizational work [41; 44].

The study and generalization of scientific and pedagogical literature made it possible to determine the main ways of implementing the culture-based approach, namely:

1. Formation in students of the ability of realizing, semantic perception of the achievements of general and national culture [1; 41].

2. Creating conditions for the formation and development of the spiritual potential of students, a system of values, attitudes, beliefs, behaviors that meet the norms and standards generally accepted in the cultural dimension [41; 44].

3. Promotion of conscious determination and realization in the activity, communication of individual cultural needs [1, p.7].

4. Expansion of the content of education by cultural meanings, which takes it beyond the narrow boundaries of purely scientific and subject guidelines [5; 44].

In the light of the above, the application of the culture-based approach to the study of the problem of forming the information competence of foreign students of medical specialties in the educational environment of the university implies:

1. Taking into account the characteristics of the contingent of students who are subjects of a certain culture, carriers of their own and national cultural values.

2. The educational environment of the university is considered an environment for the formation and development of intercultural communication skills, creates conditions for the assimilation of new cultural meanings, serves as an arena for national and cultural education, exchange and assimilation of historical and cultural experience of different nationalities and peoples.

3. The organization of pedagogical activity and communication takes into account the requirements of human, national and personal culture.

4. Declaring respect for the cultural heritage of representatives of other nationalities and promoting their own national cultural achievements (language, traditions, rituals, art, etc.).

5. The formation of students' positive attitude towards other cultures, the ability to take into account national and cultural differences in communication, interaction, and learning with other people.

6. Education of students as representatives of the medical profession of a tolerant attitude towards other people, taking into account the requirements and characteristics of their cultural, national characteristics and differences.

An *axiological approach* also occupied a significant place in the methodological basis of the study.

In the context of the study, the point of view of N. Tkacheva is shared, who considers the axiological approach as a special philosophical and pedagogical strategy based on the ideas of recognizing the special significance of universal human values, proclaiming the individual the highest value and aimed at improving the education system, increasing its effectiveness in accordance with modern social and state challenges [194, p. 81].

From the standpoint of the axiological approach, phenomena are considered in the context of their ability to meet human needs and at the same time ensure its development and increase the humanitarian level of society as a whole [95; 29; 22].

Based on the consideration of different views of scientists, the following main ideas of the axiological approach were identified:

1. The highest value in the social, creative, cultural, activity dimension is man [95; 17; 101].

2. The meaning-forming, determining and motivational factor of human life and activity is the system of values (moral, cultural, aesthetic, environmental).

3. The mastery of traditional values and the creation of new values occurs only under the condition of manifestation of the active position of the individual in activity, communication with the sociocultural environment, other people, with himself [111; 95; 233].

The basic categories of the axiological approach are: values, a person as a carrier of a system of values, value attitudes and relationships, a complex of axiological concepts (value orientations, value orientations, motivation, meaning, etc.) [29; 204; 22; 106].

The concept of "values" refers to interdisciplinary categories and is investigated by different sciences: philosophy, psychology, sociology, etc. In accordance with the subject of scientific knowledge, the interpretation of this concept is also different. In the philosophical literature, values are considered in the context of contrasting the concepts of the real, existing and desired; human life strategy, determining the model of behavior and the system of attitudes in the ethical plane. Scientists believe that basic values (goodness, love, justice) form common goals and guidelines for a person, filling life with meaning [31; 203; 144].

Sociological science studies values in accordance with the type and direction of social activity of the individual and the nature of social relationships, because values regulate social communications in society. Values are defined according to their significance for the individual as a subject of social activity, a group of people and society as a whole. Basic values are represented by such concepts as personality, freedom, equality, social justice. In turn, there are individual, collective and universal human values [37; 186].

From the point of view of psychological science, the value of nature is a special and individual reality of the individual, a component of the psychological structure of the individual and turns to this concept when studying the characteristics of its activities, behavior, communication, since they ensure the implementation of such functions as: orientational, regulatory, incentive. Values are defined as ideas formed by public consciousness about significant concepts of the social, cultural, spiritual, ethical sphere of society. Throughout life, a person on the basis of traditional values produces and forms his own set of values. This occurs as a result of activity, communication of the individual, comprehension and awareness of certain processes, phenomena, facts, etc. Values are presented in the form of certain objects, culture samples, behavior, ideals, general ideas, etc [94; 99; 202; 90].

In pedagogical science, the problem of values becomes of particular importance when substantiating the substantive and procedural components of the personality formation process. Attention is drawn to the fact that the central place in this process is occupied by the formation of a system of values of the individual, the creation of conditions for their assimilation of the achievements of socio-cultural experience, significant, meaning-forming ideas of which are converted into universal human, basic values (life, love, homeland, work, peace, life, beauty, health, love) [111; 29; 31; 22].

Values can also be defined as a complex of ideas, objects that are generally accepted in society, are of particular importance for a particular

person, group of people, society as a whole. It should also be noted that values are manifested and actualized only in the plane of the functioning of society, in various formats of social life [29; 31; 22; 101; 194; 50].

In the course of the study, it was found that values are associated with value orientations, because it is orientations that act as a factor directing a person to activity, activity, development of one's own position. Value orientation actualizes certain mechanisms of the individual aimed at achieving value ideals, carrying out activities, the result of which is the formation of values [1].

Value orientations determine the content and nature of the system of attitudes of the individual to himself, to others, to the world as a whole, to moral and ethical norms and rules of social behavior; determine the features of social, interpersonal communication of a person; influence the hierarchy of principles, beliefs, positions of the individual [125; 128].

According to S. Sysoeva and L. Bondareva value orientations in the personal dimension act as a certain socio-psychological regulator that differentiate the proposed meanings, patterns of behavior, allow one to choose from them optimal, which determine the principled, personal position of a person, his beliefs, basic ideological ideas and are implemented in communication, activities [178, p. 132]. The authors note that value orientations form the basis of the motivational sphere of the individual, contribute to the formation of a system of personality meanings (goals, interests, attitudes), determine the vector of its conscious development [178, p. 144]. A similar opinion is expressed by Yu. Boichuk, who notes that a person's behavior and activity is determined by the values that he consciously chooses and which correspond to his personal interests, needs, harmonic to his experience [22, p. 125].

In the process of research, it was found that today there is no single, generally accepted classification of values. Quite common in the scientific,

pedagogical, philosophical is the separation of the following basic groups of values:

- spiritual, which regulate the creative, scientific activity of a person and are projected into the fields of art, education, science;

- social, regulating human life in society (justice, freedom, equality);

 material, which can perform the function of a stimulant of individual mental development only in conjunction with socio-political and spiritual values) [50; 196].

In the scientific-pedagogical sources, a classification of values is also proposed into the following groups:

1. Absolute (fundamental, basic) – life, personality, goodness, faith, love, beauty, dignity of happiness.

2. National – patriotism, national pride, national dignity, national cultures, traditions, history, state national symbols, national languages; national customs, holidays, folklore.

3. General cultural – prowing, politeness, tolerance.

4. Civil – social rights, freedoms, justice, public responsibility, civic activism.

5. Family – love, devotion, loyalty, care for your family, all its members, responsibility.

6. Personal – awareness of one's own interests and needs, autonomy, self-esteem, personal freedom [106; 205; 194].

As it was found out, the value system of each person has an individual character, is formed on the basis of values generally accepted by society, which are broadcast by educational institutions, are enshrined in national and cultural traditions and are corrected, produced by the individual himself as a result of his activity, communication, interaction with society, comprehension and awareness of moral, ethical, spiritual, cultural postulates.

The results of the study prove that the system of values is formed in accordance with the priority of the following characteristics: expediency, need, value and importance, utility. Values are structured in accordance with a certain hierarchy, have a nonlinear, dynamic organization [106; 205].

Special attention in the mainstream of our research deserves to comprehend the provisions of pedagogical axiology, which was singled out and formed as an independent axiological direction. Thus G. Meshko, O. Meshko note that the recognition of the person as the highest value and end goal of social development is a unifying factor in axiology and pedagogy. After all, axiology lays the theoretical foundations for the development of a new philosophy of education and acts as a methodology for modern scientific and pedagogical research [125, p. 338]. As it was stated in the study, the nomenclature of basic values defined and adopted by pedagogical axiology is represented by educational, pedagogical and educational values [1, p. 17].

So, according to the axiological approach, education is considered as a special sociocultural phenomenon, the dominant ideas of which are the proclamation and consistent, systematic implementation of humanistic ideas, the recognition of the applicant's personality, like any other person, as the highest value, and this, in turn, implies:

- creating conditions for the most complete realization of the personal potential of the student, his comprehensive development as a person, the manifestation of his spiritual, creative, intellectual, moral forces, ensuring professional improvement of people, education in it moral and volitional sphere, qualities and character traits that ensure high social adaptation and mobility of the future specialist;

formation of a system of values among students that are generally recognized and prioritized in society;

- development of skills of effective, active value attitude to the surrounding reality, disclosure and perfection of the creative potential of students [29; 31; 22].

The study of scientific and pedagogical literature has made it possible to establish that the axiological approach is implemented through the following principles:

equality of philosophical views, united by a common system of values, taking into account their specificity and characteristics;

 equivalence of achievements of the past and products of modern innovative, creative activity, application of creative heritage of cultural and spiritual heritage in modern conditions;

- equality of people, interaction in the format of dialogue, ensuring an active, independent position of each [194; 50; 27].

The pedagogical significance of the application of the axiological approach is determined by the mechanism of its implementation itself: there is a projection of general, basic, socially significant values on the plane of personally significant priorities for a particular person. The value becomes the moral, spiritual property of a personality, obtains the status of individual significance and influences the structure of a person's relationship with the world, the hierarchy of his moral and spiritual priorities, determines the nature of activity and the model of human social behavior [29; 31; 22].

The introduction of the ideas and provisions of the axiological approach in practical activities contributed to the justification of the requirements for its application. For example, O. Sukhomlynska identified the following requirements:

1. The dominance of life-affirming, personally-supporting, optimistic ideas in the educational space.

2. Harmonious combination of the components of training and education into a single, holistic process, which is based on general provisions and is determined by a single vector of development.

3. The central figure of the educational process is the personality, its aspirations and interests, which determines the priorities of the choice of methods and means of work of the teacher: reducing the role of general scientific theoretical doctrines, giving preference to student-centered technologies.

4. The expediency of pedagogical adaptation of the values of the youth subculture that are close to youth and widely introducing them in pedagogical interaction.

5. The importance of taking into account the role and importance of the community, which acts as an arena for the formation of social values [189, p. 26-27].

The importance of the axiological approach as a theoretical and methodological basis for the study of the problem of forming the information competence of foreign students of medical specialties in the educational space of the university is due to the fact that it provides:

1. Making it possible for students to form a system of common, socially significant and professional values that are important for the future specialist. Values act as certain guidelines for the development of the personality of the future medical worker, determining the direction of his interests and needs. That is why a particular importance is gained by the humanistic, moral component within the system of values, that justifies readiness of a future medical worker to be guided by general human values in their professional activity, work for people, focus on their needs, requests, problems. Of particular importance is the acceptance by students of the value of human life and health, the desire to act actively and professionally improve themselves in order to preserve them.

2. At the same time, there is a need to focus on the actualization of values associated with activities in the modern information space, the network socio-cultural environment. A competitive specialist must confidently navigate the dynamic information flow, respond quickly to dynamic scientific, technical, technological processes and consciously understand the importance of information technology in the educational process and in further professional activities.

3. Recognition of the student's personality as the highest value, providing conditions for his comprehensive development, maximum realization of the personal and professional potential of each applicant.

4. Creating opportunities for reflection by future doctors, their selfdetermination and self-development in accordance with their own professional and individual needs.

5. The possibility of directing the learning process and the content of education to the actualization of the value attitude to the mastery of information competence.

2.1.2 Application of competence-oriented, personality and activitybased, environment-based approaches as the methodological basis of research

In the conditions of modern integration transformations that have covered all spheres of social life, the competency-based approach is defined as a priority for education. The main provisions of this approach, which necessitate the introduction of significant changes to the specified system, are reflected in such regulatory documents as: Laws of Ukraine "On Education", "On Higher Education", "On Vocational (Vocational-Technical) Education", National Development Doctrine of education in Ukraine (2002), National strategy for the
development of education in Ukraine for the period until 2021 (2013) [158; 153; 159; 155; 157].

During the scientific search, it was stated that, despite the relevance of the problem of implementing the competence-oriented approach in modern education and the high interest of scientists in various aspects of this problem, there is no single, unanimously accepted definition of this category itself. Thus, in the scientific literature, the competence-oriented approach is considered as:

- the focus of the educational process on the formation and development of the key and subject competencies of the individual, which he will use in his professional activities [88; 149]. As O. Pometun notes in this regard, the result of the development of key, general subject and subject competences is such an integrated category as general competence, which combines a system of knowledge, practical methods of activity, values, attitudes, certain practical experience and models of professional and social behavior [149, p. 38];

- reflection of an integral manifestation of professionalism, which combines elements of professional and general culture (a level of education sufficient for self-education and independent solving of cognitive problems), experience of professional activity and creativity of a specialist, which are specified in a certain system of knowledge, skills, readiness for professional activity [58, p. 34];

- gradual reorientation of the education strategy from the transfer of knowledge to the formation of a system of competences, which are determined by the individual characteristics of the individual and are aimed at his ability to adapt in dynamically changing social, political, economic and informational conditions [10, p. 53];

- a methodological approach that enables the transformation of the learning process from the accumulation of knowledge by acquirers to the ability

to creatively use the acquired knowledge in practice to solve a wide range of issues in both the professional and social spheres [13; 48; 127; 134; 208].

In the context of the raised problem, I. Yermakov's conclusions, formulated on the basis of thorough research, also aroused considerable interest. Having grouped the views of representatives of the domestic educational community on the essence and meaning of the competence-oriented approach in education, this researcher singled out three main positions of scientists on this issue.

Thus, supporters of the first of them believe that the application of the competence-oriented approach is a reflection of terms, concepts, theories, and trends popular in Europe in the educational environment. These specialists believe that the main ideas of the competence-oriented approach, the terminology on which it is based, do not have a clear scientific basis and are artificially transferred from foreign theory and practice to the domestic one.

Representatives of another position claim that the issues of the competence-oriented approach have been the subject of special attention of domestic scientists for a long time, who created valuable theoretical developments in this regard and successfully used them in practice, but in a different terminological design. Therefore, the named scientists believe that the modern theory of the competence-oriented approach reflects the scientific achievements of the past in a modern format.

I. Yermakov is close to the scientific position of those scientists who consider the competence-oriented approach as a basis for the development and improvement of the education system, which determines its professional direction and ensures a high level of social adaptation capabilities of students and their competitiveness. According to the author, it is this approach that meets today's expectations [68, p. 208-209].

The following conclusions of O. Gluzman regarding the main provisions of the competence-oriented approach are worthy of attention:

 this approach actualizes the orientation of education to the formation of generalized methods of activity in students;

 competence is a more complex and broader category than knowledge, abilities and skills, it combines the defined concepts and implements them in practical and creative perspectives;

- competence combines axiological, cognitive, operationaltechnological, effective, motivational, ethical, social, behavioral components.

- the formation and development of competences is carried out both in the process of learning and in the process of interaction with society, multifaceted activities and communication of the individual [40, p. 55-57].

Despite the ambiguity of the approaches to revealing the essence and meaning of the competence-oriented approach, it is obvious that its implementation requires the introduction of significant changes in the organization and content of the educational process. Thus, according to the conclusions of I. Rodygina, the transfer of the ideas of the competence-oriented approach to the practical plane will lead to a significant reorganization of all components of the educational process. After all, qualitative changes in the goal of education will determine a new strategy for its implementation and, as a result, adaptation of all components of the learning process to new requirements [166].

In particular, the specified approach involves:

shifting the emphasis on practical learning results, reorienting it to the professional and industrial plane, forming in students of education the ability to successfully perform the necessary practical actions, to successfully and creatively solve urgent practical tasks [18; 35; 53; 208; 115; 171; 15; 143].
 L. Parashchenko especially emphasizes that there is a change of priorities from the accumulation of a system of normative knowledge, the formation of abilities and skills to the formation of the acquirers' ability for independent practical activity, the opportunity to implement their own professional techniques, to gain

personal experience in solving practical tasks [143, p. 57]. Similar opinions are expressed by V. Lugovy, who notes that priority attention is paid to the learning outcome, which is represented by a set of competencies. It is the competences that act as a system-forming factor in the organization and content of the learning process. The selection of the content of education, the use of methods and organizational forms of education is carried out not in accordance with the professional capabilities and professional experience of teachers, but in accordance with the educational needs of the students [115, p. 19]. N. Bibik specifies that the result of education must meet the requirements of society, enable the graduate's professional competitiveness in market conditions [15, p. 45–50];

– directing the educational process to the formation of a worthy level of professionalism in future specialists, which is manifested in the combination of a high level of formation of professional and personal culture, accumulated experience and a mastered system of professionally important knowledge, abilities and skills, the ability to successfully and creatively solve any urgent tasks in practical activity [58; 214]. As O. Chasnikova notes, the competenceoriented approach involves filling the learning result with a new meaning, it is not only a system of certain theoretical knowledge and practical methods of activity, but the ability of an individual to act successfully and creatively in a specific professional field, to solve complex professional tasks, to find an original solution for overcoming various problems and difficulties in one's activity [214];

- recognition of the priority of development in the acquirers of the skills of creative solution of various levels of problems in cognitive, professional, communicative, psychological, ethical, informational and other spheres of life [57; 129; 149; 15; 143]. According to O. Pometun, competence-oriented education provides an individual with the opportunity to fully realize his own potential in various spheres of professional activity, to become

professionally and socially independent, to quickly adapt to changes and innovations in the profession, to solve complex and non-standard tasks at a high qualification level [149; p. 44];

- directing the educational process to the formation of a certain set of competencies in future specialists, which will be in demand in the future [127];

the actualization of the self-development of the individual, the direction of his activity towards self-improvement, self-education. Thus, O. Ovcharuk emphasizes that the competence of a higher education seeker, which is manifested in the ability to realize his personal potential in practice, is result his self-education, the of self-development, self-organization, generalization of acquired practical experience in the professional and socialcommunicative spheres [133, p. 11-12]. L. Rusalkina also emphasizes the importance of the ability to study, self-development, independent activity in acquiring the skills of constructive interaction in the social and professional environment [171; p. 146]. In the course of scientific research, it was established that the implementation of the competence-oriented approach requires a significant modernization of the educational process in accordance with new requirements:

- to the content of education, which involves going beyond the knowledge-oriented component and ensuring the formation of students of education experience in solving practical tasks in various spheres of activity and communication, successful mastering of various social roles and key competencies, implementation of the functions of the learning process [123; 127; 129]. As N. Nagorna clarifies, the competence-oriented approach shifts the priorities of the educational process from forming the knowledge system of learners in a wide information field to arming them with the skills to implement the acquired knowledge in the practical sphere and the sphere of communication [129, p. 267]. N. Miloradova and V. Shevchenko also note that this approach translates education from the plane of systematic and consistent accumulation of

knowledge by subjects of education to the plane of their practical implementation and creative use [127];

- to the teacher, because the informational function of the teacher is leveled, and his main functions become the following: organizational, managerial and methodical. In this case, the teacher acts as an organizer of the educational process, which creates conditions for the development of practical skills in learners, and also successfully solves a wide range of tasks in the pedagogical field based on taking into account the individual interests, abilities, and inclinations of each person [88; 209; 127; 208; 223; 231];

- to the students of education, which involves coming to the forefront of their research, independent cognitive activity, i.e. the future specialist acts not only as an object of pedagogical influence, but also as an active subject of the learning process [88; 209; 211].

Therefore, the competence-oriented approach is defined today as a priority means of modernization of higher education, it makes it possible to level the discrepancy between the cognitive, personal, professional level of development of students.

The ideas of the competence-oriented approach correspond to the modern strategy of education development, which requires a reorientation of the educational process to achieve the result of forming a competent, competitive, highly qualified specialist. It is quite logical to turn to the competency-based approach in the field of medical education, the priority task of which, according to the legal framework regulating the activities of higher medical education institutions (laws of Ukraine "On Higher Education", "On Education", the National Doctrine of the Development of Education of Ukraine in the XXI cent., Strategy for the Development of Medical Education, National Standards of Medical Education [73]), is the preparation of a generation of specialists capable of innovative professional activity, constant self-development and selfimprovement.

Thus, in the Strategy for the Development of Higher Medical Education in Ukraine (2019), it is emphasized that the urgent need today is to "ensure the health care of an employee with a high level of training" [160].

This document especially emphasizes that the system of higher medical education does not fully implement prognostic functions, the competences acquired by graduates of higher medical education institutions today are not always characterized by relevance, mobility and dynamism [160]. A certain discrepancy between the needs of medical practice, the development of medical science and the ability of higher education to meet them is diagnosed.

The modern medical field is characterized by an intensive transformation of all its components in accordance with international standards and rapid development of medical science, an increase in the number of researches and discoveries of a theoretical, technological, and practical nature.

As noted by O. Ilnytska and Z. Popovych, today there is an intensive development of the information field of medical science, systematic updating of data, in particular, replenishing it with new facts, research results, etc. The structured, stable part of information, which is transformed into the content of education, is today no more than 20% of its total volume. The rest (most) of the information is quite dynamic and variable. It should also be noted that not only the volume of information changes, but also its interpretation and interpretation [77, p. 93]. Therefore, the issue of training a new generation of specialists who are able to navigate in the modern informational professional space is of particular importance. As noted by scientists (N. Artyomova, L. Zyuzin, V. Pokhilko, G. Solovyova, S. Tsvirenko, etc.), the training of a specialist in a higher medical education institution should focus on the formation of the ability of a doctor to be mobile, ensuring his adaptation to new conditions and implementation of professional activity [26, p. 236–238].

According to the competence-oriented approach, when organizing the educational process, the emphasis is shifted from the priorities of acquiring

knowledge in the field of medicine, theoretical training of the medical student to the process of his practical activity in the medical, socio-professional, information and communication spheres. It should also be emphasized that considerable attention is paid to the training of a specialist capable of successfully and effectively solving a wide range of professional tasks, actively acting in the conditions of professional challenges, demonstrating a high level of mastery of practical methods of professional activity, academic mobility and confidently declare yourself as a competitive professional in demand on the international labor market.

It is quite logical that the development of information competence of the future medical worker is a significant component of his professional training, as it allows him to navigate in the information space, carry out selection, analysis, systematization of relevant information in accordance with educational and professional needs, use information and communication, interactive technologies and tools within the limits of diagnostic, preventive and therapeutic work, create and implement own information product, confidently use the possibilities of modern information resources (platforms British Medical, Coursera, Journal, INgenius, Medscape, Medtube, NewsMedical, Prometheus, Sermo, etc.),

During the scientific search it was it was found that the implementation of the competence-oriented approach in the field of medical education involves:

1. Development of professional and personal qualities of students in accordance with the requirements of the medical profession, the professional duties of a doctor in possible future positions [45; 76; 202; 80].

2. Obtaining personal practical experience of independently solving professional tasks in practice [76; 24; 140].

3. Formation and improvement of competencies necessary for future successful professional activity in the medical field (according to the project "The Tuning Project Medicine" (2004), the results of an integration pan-

European examination, which includes: professional and leadership qualities, the ability to make responsible decisions, work in a team, the ability to self-educate, possess the skills of analysis, systematization of information, tolerant attitude towards representatives of different social, national, cultural strata of the population) [61; 76; 104; 202; 140].

Today, special attention is paid to the issue of the organization of effective pedagogical leadership, which should ensure the purposefulness, systematicity and gradualness of the process of forming the professional competence of future medical workers. At the same time, teachers must demonstrate professional readiness for successful activities, implementation of the competence-oriented approach, ensuring high quality of the educational process [80, p. 82–83].

For the successful implementation of this approach, the teacher of a higher medical education institution must update the motivational sphere of students, create conditions for creative search work, actively use the latest methods and non-traditional forms of organization of the educational process, strengthen the practical component within the scope of the taught discipline, give the opportunity to students to independently solve tasks of broad professional topics, to gain personal experience in solving complex, non-standard professional issues [80; 45; 140].

Therefore, the application of the competence-oriented approach in institutions of higher medical education makes it possible to effectively update and improve the content and organization of the learning process, shifts the emphasis to the result of education, which involves the formation of a competent specialist capable of demonstrating a high level of readiness for effective and successful professional practical activity.

The methodological basis of our research is also a *personality-and activity-based approach*, which integrates personal and activity approaches that complement and mutually condition each other. According to scientists, the

differences between personality-oriented and activity-oriented approaches are rather conditional and projected mainly in the theoretical field [146; 190]. This is explained by the fact that the educational process should be aimed at the acquirer's personality, its development, and this is possible only under the conditions of the organization of appropriate, multifaceted activities and human communication. As O. Pehota observes in this regard, the implementation of personality-oriented training is carried out through the organization of activities on the basis of cooperation, which determines the identification and development of personal qualities of students [146, p. 281].

Also valuable are the conclusions of O. Danilyan and V. Taranenko, who interpret the concept of "personality" as the identification of a high level of spiritual and moral development of an individual with a certain system of stable qualities and traits that can manifest and develop in conditions of independent, active multifaceted activity [49, p. 249]. Therefore, only in the conditions of activity, a person has the opportunity for self-realization and self-development, manifestation and improvement of his unique features, aptitudes and abilities.

Let's dwell in more detail on the two components of the personality-andactivity-based approach, that is, separately on the personality-oriented and activity-oriented approaches. Thus, in many psychological and pedagogical sources, the essence of the personality-oriented approach is considered in the context of recognizing the learner as a unique, distinctive, sovereign person, a central figure in the educational process, who is characterized by a complex of unique features, interests, abilities and aspirations, as well as individual social experience [8; 210; 232; 120; 164; 79; 192; 195].

According to I. Zaichenko, the personality-oriented approach proclaims the uniqueness of the acquirer's personality and stipulates her rights to respectful treatment, freedom of development, creation of conditions for the development of all natural forces and inclinations, full realization of her intellectual and spiritual potential [70, p. 32]. Similar opinions are expressed by

I. Beh, O. Dubaseniuk, and S. Sysoeva, who note that, according to the personal approach, not only the individual characteristics and intellectual and spiritual potential of the individual are taken into account, but also his opportunities for self-improvement and self-development [14; 177; 162].

The study of scientific and pedagogical literature made it possible to determine the following main features of the personal approach:

1. Orientation to the individual as a key figure and the main goal of the educational process.

2. Recognition of the subject role of students in the organization of the educational process.

3. Development of individual properties and personal qualities of the acquirer.

4. Formation of the system of values and attitudes of the individual.

5. Stimulation of education seekers to creative activity.

6. Personal motivation for self-development, self-improvement, self-actualization.

7. Development of activity, independence, skills of socially responsible and active behavior of education seekers [14; 162; 12].

Within the framework of our research conclusions of O. Dubaseniuk deserve attention, who considers the personality-oriented approach as a certain teaching tactic, which combines the consideration of constructive practical experience and the results of scientific and theoretical investigations, is implemented in the construction of an effective and effective educational process, and is also based on a respectful attitude towards each individual, aiming at the full disclosure of its potential [162].

Also of interest are the basic principles of the personality-oriented approach defined by N. Gomelya:

humanism - protection of the rights and freedoms of the individual,
 promotion of the full realization and development of all his qualities, abilities,
 inclinations, promotion of self-development and self-improvement;

 complexity - taking into account a complex system of factors that determine the specificity of a certain type of activity and communication of an individual, his success and effectiveness in these types of activity;

 systemicity - individual, psychological features of a person, his abilities, interests, opportunities are components of a complex system, all of them are in certain relations of interaction and mutual influence;

- of social determination - the individual is the subject of creative activity [42, p. 28-29].

Summarizing the scientific and theoretical investigations of scientists and the results of the practical experience of teachers, it is possible to determine the following ways of implementing a personality-oriented approach:

1. Manifesting the attitude towards each student as a full-fledged participant and subject of the educational process [146, 210; 120; 164].

2. Creation of conditions for the full disclosure of the potential of the acquirer, his interests, inclinations, abilities, personal individual capabilities, promotion of self-development and self-realization of the individual. During the organization of the educational process, attention is primarily focused not on the content of education and methodological tools for its implementation, but on the personality of the student, his individual characteristics and requests. The priority task of the learning process, the indicator of the level of academic success of a person is not the system of acquired knowledge and mastered abilities and skills, but the development of a complex of individual, personal characteristics: motivation, cognitive activity and independence, a positive attitude to intellectual activity, creative abilities, etc. [190, p. 10]. Under such conditions, the content of the educational process changes, methods and forms of search-research, dialogic learning come to the fore.

3. Deep study of the personality of the acquirer, his motivational, cognitive, emotional and volitional spheres. As O. Pehota notes, the personality-orientational approach acts as a certain methodological toolkit, which unites a complex of provisions, methods, means of methodical-psychodiagnostic and psychological-technological direction, which allows to deeply and fully study the personality of the acquirer, to develop and implement a program of his harmonious development in a specific pedagogical situation in accordance with the formulated goals and objectives of the educational process [146, p. 280].

4. As specified by O. Pehota and V. Rybalka, the methodological toolkit of the personality-oriented approach enables a thorough study of the individual, conducting a systematic diagnosis of his personal traits, a comprehensive analysis of the obtained research results and the application of a system of methods and means aimed at the comprehensive development of the individual, creating conditions for improving it qualities during the performance of certain activities, social communication [146; 164]. At the same time, according to scientists, special attention is paid to the study of such individual characteristics of the acquirer's personality, such as: the nature of the course of mental processes, memory properties, the level of formation of motives, the degree of development of cognitive interests and activity, the presence of a spectrum of personal abilities, inclinations, needs, practical experience in a certain field, the formation of attitudes to educational activities, a certain field of knowledge, a specific type of intellectual or social activity [146; 210; 120; 164].

5. The creation of appropriate conditions, a certain developmental environment, which will contribute to the comprehensive development of the intellectual, moral, spiritual, communication capabilities of an individual, his psychological and personal traits, the formation of the ability for self-development, self-improvement, active responsible activity and constructive communication in society [1, p. 17].

6. Ensuring the harmonious and comprehensive development of the individual, the realization of all his abilities and inclinations, the formation of his own unique individuality, his "I" [79, p. 98].

Therefore, from the standpoint of a personality-oriented approach, the peculiarities of the organization of the educational process are considered and studied through the needs, interests, and requests of the acquirer's personality. At the same time, the individual acts as a key figure that largely determines the content and methodical content of the educational process.

For a better understanding of the essence of the second (activity) component of the personality-and-activity-based approach, it is advisable to dwell in more detail on the core concept of this category - activity. As it turned out, the theory of activity has been thoroughly developed in many psychological, pedagogical, philosophical studies, where the indicated phenomenon is considered as:

- a high level of organized interaction of the individual with society, the world, the surrounding environment, the result of which is the transformation of a person's personal and social experience, which determines its development. At the same time, the driving factor of this interaction is human needs [168; 169; 170];

a certain way of social existence of an individual, characterized by activity, independence, creativity, affects the surrounding environment and oneself, contributes to the improvement and development of all subjects of this interaction [121, p. 31-32];

- a special form of a person's attitude to the surrounding environment, the world, which is aimed at changing and improving objects, processes, phenomena in accordance with one's own needs and interests [152, p. 72];

a special activity that manifests itself in a complex of conscious actions of an individual, subordinated to the implementation of defined tasks [117, p. 81].

Therefore, it can be stated that the activity is characterized by an active conscious attitude to the surrounding world, has a diverse, creative character, accumulates the personal and social experience of a person, causes progressive and qualitative changes in all subjects of this interaction, is determined by the interests and needs of the individual, the goals defined by him and tasks. Scientists call one of the defining characteristics of an activity its subjectivity, that is, the activity is carried out by a specific person (subject) or a group of people who organize, plan, manage, step by step implement the activity in accordance with the defined goal. Also, most scientists note the creative nature of the activity, as it transforms objects and phenomena of the environment, giving them new meaning and content. Thus, S. Rubinstein defined the following essential signs of activity: subjectivity, meaningfulness, objectivity and creativity [168; 169; 170].

We are also impressed by the scientific position of T. Martyniuk, who, within the scope of studying the process of implementing the activity approach, established that the main characteristics of activity are the following: purposefulness, expediency, objectivity, optimality, universality, creativity, sociality [121, p. 31-32].

The complex nature of the mentioned phenomenon led to the need to reveal its structure and content. Thus, in some scientific sources, it is determined that the activity includes the following components:

motive, goal, means, situation or event, result, evaluation [168, p.
15];

motive, goal, methods of action, psychophysiological features of the individual [103, p. 80-81];

- content component (knowledge system), operational component (ability, skills, methods of activity), motivational component, goal [210].

As noted in the scientific literature, activity is a powerful factor, a condition for personality development. In order to organize an effective and

efficient educational process, it is necessary to take into account the peculiarities of the psychological mechanism of educational activity, and this implies the need to update the motivation of students, to give their knowledge a systematic character, to ensure the assimilation of certain practical methods of activity, to promote awareness of the goals and tasks set by young people, to take into account the individual characteristics of each personality, involve her in various types of activities.

Based on the logic of building an educational process, the characteristic feature of which is a two-sided nature, the activity approach involves taking into account the peculiarities of the activity of both the learner and the teacher. At the same time, it should be noted that the activity of all subjects of the educational process must be systematic, integral, interconnected, logically, meaningfully and organizationally united and aimed at achieving a common goal. Therefore, special attention is paid to the study of professional and individual-personal qualities of teachers, their ability to organize expedient, meaningful, constructive educational and cognitive activities of students, focused on their development, formation of necessary properties, personal values, attitudes, realization of abilities and inclinations of each individual [138; 213].

On the basis of the above, it can be noted that the personality-based and activity-based components mutually determine and complement each other in the integral process of personality development, actualize the focus on selfdevelopment, self-improvement and self-education of a person. The unifying factor of personal and activity aspects is also the creative, professional selfrealization of an individual, which acts as the goal and result of a certain type of professional activity, determines its content, structure and features of the organization.

When organizing the educational process, it is necessary to take into account the possibilities of activities that determine the independent cognitive

activity of an individual and create conditions for his comprehensive personal and professional self-development. At the same time, focusing attention on the needs and requests of the individual, recognizing him as the central figure of the entire learning process (with his motivation, goals, needs and educational and professional requests, psychological and age characteristics) requires the definition of certain requirements for the organization of diverse, meaningful activities and communication acquirers.

Therefore, the personality-and-activity-based approach provides for the special organization of multifaceted, expedient activity of the individual, which has a subjective, creative, systemic character and in the conditions of which comprehensive development of the individual is carried out, his successful mastering of the systems of necessary theoretical knowledge and practical methods of activity, the creative potential of the individual is realized, ensure the formation of its socially significant qualities, traits, values.

In the process of scientific research, it was established that the main requirements of the personality-and-activity-based approach to the educational process are as follows:

1. Recognition of the student's personality as the central figure of the educational process, focused on meeting the needs and requests of the future specialist, ensuring his personal development in accordance with individual and age characteristics.

2. Building relationships between all participants in the educational process at the subject-subject level, introducing methods of dialogic communication, providing facilitation and pedagogical support at each stage of this process.

3. Organization of purposeful multifaceted activities for the individual, creation of a positive emotional and motivational atmosphere, which will contribute to comprehensive development and self-development, self-improvement of the individual [89; 197; 175].

Summarizing the above, it can be noted that the implementation of the personality-and-activity-based approach in the study of the problem of the formation of information competence of foreign students of medical specialties involves the orientation of the educational process on the personality of the acquirer as a bearer of unique traits, abilities, inclinations and interests, ensuring his professional development taking into account individual characteristics and needs. In order to fully realize the personal potential of students, conditions (organizational, psychological, educational) are created that allow everyone to express himself as a subject of cognitive, professional, subject-related activities.

In accordance with the individual and professional educational requests of the students, their individual educational trajectory is determined, which is implemented through individual programs, selectivity of tasks on certain topics and modules. Active and interactive learning methods, dialogic forms of organization of the initial process are used to organize the subject-subject format of communication and educational activities. The use of opportunities for research, research, project work ensures independent cognitive activity of students, encourages them to self-education and self-development.

An important role in the research is played by the *environment-based* approach. According to this approach, the process of personality development, the peculiarities of the formation of its worldview, thinking, methods of activity, and the nature of communication are considered in the context of the influence of the surrounding environment [60; 130; 123].

In the process of scientific research, it was stated that the environmentbased approach involves a specially organized study of the environment, the study of the peculiarities of the functioning of all processes and phenomena that make it up and determine the nature of the impact on the individual. In the scientific and pedagogical literature, the environment is considered as a social space in which a person resides, natural, social, spiritual, material conditions and circumstances of his life and development. Therefore, the environment

unites everything that surrounds a person: the social structure of society, the vector of state development, mass media, aesthetics, the space of life, the nature of communication and building relationships in the family, team, society, etc. [60; 130; 173].

A deep understanding of the logic of the interaction of all components of the environment and the development of a constructive toolkit of pedagogical influence allows you to manage and manage the processes of interaction of an individual with the environment, to design an efficient, effective organization of such interaction [54; 81; 123; 92]. It is also important to note that within the framework of pedagogical science, not only are the issues of interaction of the participants of the educational process with the environment studied, but also the possibilities of purposeful creation of a systematic educational environment, which ensures an increase in the effectiveness of the learning process for its subjects, are also explored.

The conducted research made it possible to determine the following main conceptual ideas of the environment-based approach:

- the environment affects the personality and determines the peculiarities of its development, regulates the activity, behavior and communication of the individual;

- the environment creates conditions for active activity, communication of a person, building broad communication links with society;

- the environment changes under the influence of the activity and communication of an individual, a group of people;

- the environment acts as an arena for the realization of individual interests, needs, abilities of the individual;

personality development is determined by the need to overcome the contradiction between the requirements of the environment and the capabilities of the individual;

- a specific type of environment contributes to the formation of relevant qualities, traits, skills, personality models [92, 173; 72].

Valuable for our research are the conclusions of scientists regarding the educational environment, which is formed by the interaction and mutual influence of individual microenvironments (family, socio-cultural, pedagogical). The specified components can have both a specially organized and a spontaneous nature of emergence and functioning. At the same time, the educational environment acts as an arena for the interaction of various educational systems, their components and subjects of education. All components of the educational environment affect the personality, its development, create conditions for realizing the personal potential of all participants in the educational process [53; 56].

1. Undoubtedly, a special place in the mentioned nomenclature is occupied by the institution of higher education as an autonomous and integral institution. The special status of educational institutions in the implementation of the environment-based approach is explained by a number of reasons:

2. Educational institutions act as progressive agents of change in the educational sphere. It is within the scope of the activity of this institution that all processes of modernization of all components of the system and the content of education are implemented.

3. Organizational, educational, educational, and developmental activities of the educational institution are directly aimed at the personality of the student and are carried out constantly, systematically, and purposefully. At the same time, the realization of the intellectual, professional, and personal potential of the subjects of the educational process is determined by the conditions created by the educational institution and in accordance with the development strategies determined by it, the value system, the peculiarities of the organization of educational and educational processes, etc. [79; 53; 72; 176].

In the light of the above, the conclusions of O. Yakymovych and Y. Ilchyshyn regarding the pedagogical expediency of applying the environment-based approach in the educational practice of universities deserve attention, namely the following:

 the institution of higher education exerts an indirect influence on the individual, which is projected on the subconscious level and is characterized by stability and scale;

- the student of education has the opportunity for independent activity, showing initiative;

- the adaptive capabilities of the individual are improved in the conditions of interaction and mutual influence with the objects of the educational environment of the university;

– enables a comprehensive analysis of all components of the educational process, determination of the characteristics of the acquirer's personality, which contributes to the development of constructive learning and upbringing technologies, the use of appropriate methods, forms, and means of education for a full-fledged, purposeful, pedagogically appropriate influence on the individual [224, p. 350-354].

It should be noted that scientists consider the construction and organization of an educational environment to be an important component of the implementation of the environment-based approach in the pedagogical practice of higher education institutions, which would create optimal conditions for the personal and professional development of the student of education, would function on the basis of humanism and democracy, and have an innovative, professionally oriented character. During the research, it was established that the environment will realize its developmental potential under the following conditions:

1. Activity of all subjects of the environment, which is aimed at mastering and personal assimilation of the subject, educational, activity content of the environment.

2. Correspondence to the interests, requests and individual needs of the individual, his personal and professional meanings.

3. Availability of opportunities for activity, creativity, communication of an individual, his personal and professional self-realization.

4. Systematic interaction between all subjects of the educational environment, in the process of which a creative transformation of certain of its objects takes place, which determines the development of the environment as a whole and contributes to the professional improvement of the teacher.

5. The nature of the interaction between the subjects of the environment should be creative, take place on a democratic basis, create an atmosphere of free, creative search, stimulate independent cognitive activity, activity and initiative of the individual [92; 119].

So, in the course of scientific research, it was stated that the application of the environment-based approach has certain advantages, which are determined by the very logic of its implementation:

1. Attention is paid to the selection of the content of education, methodical tools taking into account modern trends in the development of education, achievements of science and technology, the possibilities of electronic and information technologies, tools, educational Internet networks and platforms.

2. Effective development of professional, intellectual, communicative, personal capabilities and traits of the students is ensured by a special, purposeful organization of educational, professional, social, educational conditions.

3. The professional orientation of education, which is projected on educational, educational, leisure, scientific research activities and

communication of all subjects of the educational process, enables high quality professional training of the acquirer [225; 221; 55].

In the scientific and pedagogical literature, it is also noted that conducting research based on the environment-based approach requires taking into account certain features that characterize it, namely:

1. The result is ensured by the complex interaction of the teacher's pedagogical activity and the effects of the environment, which contributes to the actualization of the active, independent cognitive activity of students.

2. The multi-vector and multi-significance of pedagogical influences on the personality is harmonized and agreed upon.

3. A harmonious emotional, intellectual, psychological space is created for interaction, creativity and self-realization of education seekers.

4. Active, multi-directional activity of foragers, systematic and multilevel interaction with numerous objects of the environment is ensured [225; 207].

Considering the above, it can be noted that the use of an environmentbased approach in the study of the problem of the formation of information competence of foreign students of medical specialties is of particular importance. Today, education is under conditions of active modernization in accordance with modern challenges, intensive development of digital technologies, acceleration of information processes in all spheres of social life. Qualitative changes in the organization and content of the educational process, filling it with the latest technologies, wide use of information and communication tools are diagnosed.

Hence, the use of an environment-based approach in research the formation of informational competence of foreign students of medical specialties involves taking into account the possibilities of the educational space of the university to solve the assigned tasks, which acts as an educational, organizational, and communication basis for the activities and communication

of the students. Attention is focused on the peculiarities of the organization and development of the educational space of the university, its development in accordance with the requirements of innovation, creativity, improvement of interdisciplinary relations, the use of information technology tools to increase the effectiveness of the formation of information competence of medical students. For the formation of this competence in them, the organization of the appropriate educational environment is of priority importance. At the same time, almost all components of the educational process are subject to significant updating and improvement: the content of education (digitization of didactic material, development of educational and methodological complex, creation of a virtual library database), forms and methods of education (active and interactive methods prevail, non-traditional forms of educational organization aimed at effective communication, interaction between all subjects of the educational process), means (multimedia, mobile, educational services, platforms, blogs, etc.).

2.1.3 The use of hermeneutic and contextual approaches in the study of the problem of information competence formation in international medical students

It should be noted that the concept "hermeneutics" (from the Greek. $\epsilon\rho\mu\eta\nu\epsilon\upsilon\omega$ - to understand, interpret) has an interdisciplinary character, its conclusions and basic ideas are used mainly in scientific-theoretical and practical investigations of humanitarian fields (philology, linguistics, history, philosophy, religious studies, cultural studies, art history, etc.). Such a wide practical scientific-subject range determines the ambiguity of the definition of the term "hermeneutics", as it reflects the aspects and tasks of a certain scientific field.

The study of scientific and reference literature made it possible to determine the main approaches to the interpretation of the concept of "hermeneutics", which is considered as:

- the art of understanding and making sense of the surrounding realities, social and natural phenomena, historical and modern events, values of culture and humanity, oneself and other people, aimed at on determining the meaning, understanding the essence and own interpretation of the received information [63; 85; 11; 96];

- the art of explaining certain events and facts based on the study and interpretation of historical sources, written monuments [46; 78; 187];

- the direction of scientific knowledge, which is based on the understanding and interpretation of scientific (philosophical, historical, etc.), religious and artistic literature, certain scientific texts [63; 46; 38; 47; 85];

- the theory of understanding and interpreting texts in their broadest sense [91; 110; 64].

It is worth noting that the theory of hermeneutics acquires special importance for scientific fields in which textual material is the basis and basis for their development. The importance of the hermeneutic interpretation of texts lies in the fact that they are created in a certain cultural and historical environment and context, therefore their study and interpretation from the perspective of relevant socio-cultural, philosophical, historical features and taking into account the author's position increases the level of objectivity of the obtained results [63; 85; 11].

For a more detailed clarification of the essence and meaning of the hermeneutic approach, it is advisable to analyze the features of the process of understanding, which is decisive in the hermeneutic theory. Thus, in the scientific literature, the concept of "understanding" is revealed as a conscious process of understanding the facts and phenomena of reality, their essence, logic and content. At the same time, the specified facts and phenomena are studied

not in the format of their immediate course and existence, but in the form of certain meaningful symbolic symbols, informational texts (literary, musical, historical, artistic, philosophical, etc.). Therefore, an important function of understanding is the correct interpretation of the semantic meaning of the text, adequate perception of the author's ideas and interpretations [105]. As E. Betti noted, studying a certain text does not guarantee its complete and absolute understanding, that is, one can expect the so-called probable understanding, when the text can be interpreted both correctly and incorrectly [11].

At the same time, the process of understanding, in addition to an objective, rational component, also contains a subjective, irrational one, which is realized through the emotional and sensory sphere of a person, his personal experience. In light of this, S. Kvit, analyzing the theory of hermeneutics and its use in science, notes that the process of cognition has rational (due to logic, the intellectual sphere of a person) and at the same time irrational (due to the emotional-sensual sphere, creativity) aspects [85, p. 33]. It is also worth noting that A. Lynenko, based on the study of the positions of scientists regarding the disclosure of the peculiarities of understanding the text, concludes that the results of its interpretation can be richer and more meaningful than the author's semantic images. Since the interpretation has an exclusively creative nature, the author's ideas and meanings are enriched by the personal emotional and intellectual experience of the reader, filled with his personal context, transformed in accordance with modern formats and values [105, p. 57].

Based on the conclusions of F. Schleiermacher, L. Shpylova singles out the following main stages of the comprehension process:

1. Comprehension of the integrity of the text at the level of anticipation of its meaning.

2. Comprehension of individual parts of the text, taking into account the general semantic load.

3. Interpretation of the meaning of the text as a set of meanings of its individual parts [222, p. 234].

In the context of research, a special place is occupied by the works of scientists devoted to the study of the phenomenon of understanding as a special category of the cognitive process. Thus, in the scientific and psychological literature, the essence of the process of understanding is interpreted as a certain, generalized cognitive attitude of the individual to the phenomena of reality, the surrounding environment, as a basis for building constructive interaction and communication with other people [168; 169; 170]. In particular, A. Brudnyi considers understanding as a result of the cognitive activity of an individual, his own intellectual achievements and opportunities. According to the author, understanding, being the natural basis of an individual, embodies his conscious attitude to the surrounding world, himself and other people [23, p. 124].

As emphasized in the psychological and pedagogical literature, understanding goes beyond the projection of the process of obtaining certain information, acquiring a system of knowledge, that is, it covers a wider field of psychological mechanisms and functions. Thus, understanding includes perception, comprehension, transformation of knowledge, its conversion into one's own beliefs, values, readiness and the ability to implement in practice, that is, acquired knowledge becomes an intellectual achievement of an individual and affects his worldview, value system, activity and communication. Therefore, understanding is connected with the thinking of an individual and is its first stage [105, p. 57-58].

It is worth noting that in the scientific literature, the concepts of "understanding" and "explanation" are clearly distinguished. Thus, understanding is a holistic, creative and searching process, and explanation is built on logic and cause-and-effect relationships, that is, a structured process. Explanation involves the establishment of logical connections between new information for a person, which he studies and tries to master, and the

knowledge that was learned earlier. In turn, the process of understanding, in its essence, is the individual's acquisition of new meanings and meanings, enrichment of his own intellectual sphere [105; 93; 21].

Undoubtedly, the concept of understanding acquires special importance for pedagogical theory and practice, as it allows to establish the features of the process of assimilation of knowledge by learners, acquisition of their own experience, effective organization of cognitive activity. In light of this, the following main advantages of the hermeneutic approach are defined in the pedagogical paradigm, because:

1. It helps the teacher to find out and clearly define the connections between individual facts, phenomena of the pedagogical process, to establish a logical and well-founded system of cause-and-effect relationships.

2. It contributes to the formation of a responsible position of the teacher as a conscious, motivated organizer of the educational process, aimed at ensuring high cognitive achievements of students.

3. It allows teachers to build effective interaction with students, to eliminate difficulties when solving fundamentally new tasks, to move away from templates and stereotypes in work, to show creativity, originality and nonstandard thinking when making decisions and performing practical professional actions.

4. It determines the subject position of the learner in the educational and cognitive process, actualizes his abilities to manage his own cognitive process, promotes self-development and self-improvement of the individual.

5. It is aimed at the formation of a conscious, meaningful attitude of each subject of education to the acquisition of knowledge, the formation of cognitive activity skills [105; 148].

It should be noted that modern pedagogical science has significant theoretical developments and substantiated results of the practical application of the hermeneutic approach. The concept of "pedagogical hermeneutics", which is

interpreted in accordance with the subject and object of pedagogical science, its tasks, even entered the scientific circulation and is quite used. In light of this, the traditional definition of hermeneutics is projected into the plane of pedagogical theory and practice. As it turned out, pedagogical hermeneutics is the theory and practice of understanding pedagogical knowledge, which are presented in special literature, scientific texts and present various aspects of pedagogical reality: peculiarities of the organization and implementation of the educational process, content and tools, opportunities for its improvement, etc. The goal of pedagogical hermeneutics is a deep understanding of this knowledge and its interpretation, taking into account the social, emotional, and spiritual experience of humanity, the achievements of culture, art, folk art, and the individual experience of the researcher [71; 105; 85; 87].

On the basis of the above, the following main ways of implementing the hermeneutic approach in the field of education are defined:

1. Introduction of dialogic forms and methods of learning (disputes, discussions, debates, etc.) with arguments and explanations of the point of view of each participant.

2. Building special, trusting relationships between all participants of the educational process based on the manifestation of humanism, tolerance, respect, empathy, readiness to hear and accept the positions of one's opponents, to find valuable aspects in them.

3. Creation of conditions for the actualization of abilities for selfunderstanding, self-organization of the individual.

4. Promoting the development of the motivational sphere of the achievers [105; 148; 114; 23].

The value of the hermeneutic approach during the study of the problem of the formation of information competence of foreign students of medical specialties in the educational space of the university is reinforced by the peculiarities of the contingent of students who are speakers of a different

language culture and experience certain difficulties in building communication, assimilating information, other types of activities and communication, which are implemented using the means of language. The hermeneutic approach ensures adequate perception and understanding of the received information, its correct interpretation and understanding. Taking into account the above, the specified approach to the study of the formation of information competence of students of medical specialties is implemented in the following aspects:

- work with the texts of scientific, methodical, applied literature, which is offered for study in order to form a stable system of professional knowledge, relevant and necessary for future successful activities. Attention is focused on a deep and correct understanding of basic concepts, as well as ideas, theories, hypotheses, empirical data in medical theory and practice, information about the results of using traditional and innovative methods, their content and limits of application;

 mastery and competent use of medical terminology, which is the basis of professional language and combines the nomenclature of anatomical, clinical, histological and other special concepts and definitions;

- ensuring the correct translation of texts from one language to another, understanding the meaning of translated information, correlating it with terminological and conceptual samples of the native language;

implementation of objective interpretation of received information
 and the possibility of interpreting it, subjecting it with new meanings;

- formation of professionally significant communication skills, readiness for constructive dialogue and polylogue in the conditions of intercultural interaction and communication. Attention is focused on the ability to build communication on the basis of mutual understanding, orientation to the patient's personality, taking into account his national-cultural, mental, and personal characteristics.

The implementation of the hermeneutic approach in researching the formation of information competence of students of medical specialties takes place in the following directions:

- the use of interactive methods and non-traditional forms of organization of the educational process (discussions, debates, round tables, battles, debates), which encourage students to reasoned, stylistically and terminologically verified justification of their own positions and contribute to the improvement of their professional speech;

– involvement of students in research work, elaboration and analysis of scientific literature, preparation of the results of own scientific research in the form of reports, theses, articles, messages, presentations, poster reports, projects, etc.;

- the use of methods and forms of training organization (business and role-playing games, solving problem situations, trainings), which reproduce and project situations that are close to the format of future practical activities and require updating of acquired professional knowledge, confident command of special terms and deep understanding of basic concepts.

An important methodological approach for researching the problem is *the contextual approach*. The application of the contextual approach makes it possible to eliminate the contradictions between the urgent needs of training highly professional specialists, who must be able to effectively carry out professional activities, and the possibilities of their training in the conditions of the modern education system, the dominant part of which is ensuring their assimilation of the system of knowledge and skills in the process of carrying out educational activities, assimilation of social human experience. The introduction of a contextual approach to the educational process involves its reorientation to the professional training of future specialists by means of the gradual saturation of the learning process with elements of professional activity, the introduction of an additional element into the "learning – professional activity" link - quasi-

professional activity, which is educational in organization, but as close as possible in content to professional [6; 132; 109; 126; 113].

The educational process, in accordance with the requirements of contextual learning, is reoriented to the preparation of a specialist for future professional activity.

The theory and practice of contextual learning was thoroughly developed in the works of A. Verbytskyi and other representatives of his scientific school [281]. Based on their conclusions, modern scientists consider the contextual approach as:

directing the content, methods, organization of the educational process to the maximum approximation of the students to the future professional activity in the theoretical, practical and social planes [6; 132];

organization of the education process of education seekers in accordance with their individual needs and general tasks of future practical activities [67];

- subordinating the methods, forms of organization of educational activities of education seekers to the solution of practical tasks of a professional nature, to the solution of professional production problems of subject, communicative, organizational orientation [28; 102];

- modernization of the content of education in accordance with the current problems of the chosen professional field, integration of educational and professional activities, which causes the gradual change of educational goals, tasks, methods and forms of organization of activities to professional ones, contributes to the understanding and responsible acceptance by the student of the goals and tasks of education as personal [126, p. 96];

specially organized integration of educational and professional activities aimed at forming the professional competence of the future specialist [109].

The concept of "context" is widely used in linguistics and is considered as a complete, logically completed text fragment that has a certain semantic load [36]. It should be noted that the requirements of contextual education necessitate a new definition of the concept of "context", filling it with psychological and pedagogical content. In modern scientific and pedagogical literature, "context" is defined as the basic category of contextual learning.

In particular, V. Zhelanova, relying on the results of A. Verbytskyi's research, interprets the given definition as a certain set of conditions of activity, communication, life of each individual, which determine the meaning content, the meaning of each specific situation, event in a person's life, that is, it acts as a meaning-making factor [67]. It is the context that provides a person with full information about the specifics of the activity being performed, the consequences of certain actions, the presence of factors that will affect the outcome of the activity, ensuring the formation of a person's conscious attitude to a certain activity, the ability to predict its results and rationally choose the optimal algorithm of actions [28; 83].

As it turned out, in some scientific works devoted to the study of various aspects of contextual learning, two types of context are distinguished: subject and social, which collectively determine reproduction in educational activities, the content of education, specially organized methods of communication, various aspects of future professional activity, modeling of specific situations close to production conditions [67; 109]. As V. Zhelanova clarifies, the subject context is modeled with the help of creative tasks, problem situations, the subject field of which is projected into the plane of future professional activity. The social context is implemented through the wide application of interactive forms and methods of learning, the organization of rational interaction between students and the teacher, taking into account the individual and personal requests, needs, characteristics of each participant and in accordance with the

requirements of constructive social and professional communication of the future specialist, citizen, team member [67].

It should be noted that contextual learning today is determined by the optimal strategy for the implementation of this process, since it successfully implements the tasks set before modern education - the training of a highly professional, creative, independent and responsible, competitive specialist who is able not only to demonstrate knowledge in the theoretical field of the chosen specialty, but also possesses a wide arsenal of practical methods of professional activity.

It should be noted that addressing the subject and social contexts in the organization of educational activities has certain traditions in educational practice. Thus, certain aspects of the theory of contextual learning were implemented when applying some technologies, namely:

problem-based learning – conditions are created in which learners
 feel and realize the need to find new, necessary information to solve the task.
 The problematic task appeals to the cognitive sphere of students, attracts their
 attention, which activates independent search work;

 cooperative training – students carry out educational activities in specially organized groups, each of which performs a certain task, and group members are united by mutual responsibility for the successful performance of the work, its effectiveness;

 project-based learning – students create and implement a certain project. This nature of interaction stimulates students to carry out independent search work, show initiative, independence, creativity;

 non-formal education – optimal conditions are created for the implementation of a complex of practical methods of activity, students work on special projects, prepare and conduct events aimed at solving current community problems;

- on-the-job training – the training process is projected onto the professional field: its individual stages are implemented in production conditions, during the training process, situations close to professional activity are modeled, students solve tasks of a professional nature [126; 227; 228]].

The analysis of the scientific and pedagogical literature made it possible to highlight the advantages of the application and practical implementation of the contextual approach:

1. The acquirer takes an active, active, subject position, which contributes to the development of independence, responsibility, the ability to analyze, make decisions, etc.

2. The learning process takes place in conditions as close as possible to the future professional activity, using a wide arsenal of professional and practical training material.

3. A fundamentally new attitude to the learning process. Acquiring knowledge, mastering new information occurs due to the awareness of the lack of necessary facts, ideas, theories for the successful performance of certain actions, solving tasks in the professional sphere, learning acquires personal meaning and significance, stimulates the development of cognitive interests and cognitive activity of the individual.

4. Systematization of a wide range of knowledge offered for study, structuring it in accordance with the tasks, goals of professional activity.

5. Orientation of pedagogical activity, educational process on the personality of the student, taking into account his individual characteristics, needs, interests.

6. A constructive, balanced combination of educational, scientific, organizational, professional activities and communication of the winners.

7. The combination of individual, group and collective forms of training of the students, which ensures the maximum development of their individual qualities and abilities, the full realization of personal potential.

8. Helping to increase the motivation of students to study and master the future profession, development of cognitive, social, professional motives.

9. The zone of development of the future specialist is not limited exclusively to the improvement of the processes of perception, memory, and attention, as in the case of the traditional organization of training [28; 67; 83; 66; 102].

In the study, the works of modern scientists were useful, in which certain aspects of the problem of the contextual approach were highlighted. Thus, R. Bakumenko, Nekhayenko, V. Yagupov singled out the following main principles of its implementation:

- the active position of the acquirer in educational activities, the subjectivity of his position;

creation of favorable conditions for the formation of knowledge,
 abilities and skills in future specialists, necessary for the implementation of
 professional activities in the future;

 focusing attention on actual problems of the future profession and preparing students for successful activity in the chosen profession;

- organization of educational activities of students in accordance with the content, tasks, features of the chosen profession;

 construction of pedagogical activity on the basis of subject-subject interaction between all participants of the educational process;

 updating and enriching the organization of education with new and unconventional methods, forms, means;

promotion of comprehensive development of the recipient's personality in the scientific, practical, communication, and personal spheres [6; 132].

The study established that the implementation of the contextual approach involves systematic, consistent and purposeful filling of educational activities
with the subject and social context of the professional direction in accordance with the chosen profession.

The scientific and pedagogical literature also presents and substantiates the stages of implementing contextual learning, namely:

- determining the relevance of tasks, problems that need to be solved;

 simulation of educational situations that can be implemented within the educational process, in production, during communication;

- stimulating students to self-education, self-control of their own educational activities, self-development in educational and professional spheres;

improvement and consolidation of practical ways of activity of the acquirers in subject and social contexts;

- organization of interaction between students, implementation of mutual learning;

the implementation of authentic evaluation of the success of students
 [126; 230].

We would like to note that contextual learning significantly changes the sequence of actions of the acquirer in the process of mastering knowledge, and the learning process itself turns into an experimental process, a process of independent search for knowledge, self-education and self-development. The specified training model creates such external conditions that contribute to the student's independent determination of his own position on various professional issues and its active defense. The basis of contextual learning is the setting of certain professional tasks, the solution of which requires the student to fulfill a defined algorithm of actions: awareness of the goal, analysis of the actual material and the existing situation, selection and formulation of the problem, setting of a specific task, search for a solution, justification and implementation of the chosen solution, publication of the results [113, p. 99].

In the course of the conducted research, the conclusions of scientists regarding the implementation of contextual learning have a certain value. Since its main goal is the preparation of a highly professional specialist, the organization of the educational process is reoriented to the implementation of the practical component, the creative approach of teachers to the involvement of students in future professional activities, providing them with the necessary information, forming in them the methods of carrying out practical activities, encouraging them to show independence and self-education, which will ensure their professional efficiency in the future.

However, today it is diagnosed that there is no ready-made, well-founded pedagogical technology that could fully meet the needs of contextual learning, which can be implemented using individual educational technologies, methods, methods, forms of learning or creative combination of their individual components.

In particular, in the scientific literature, during the organization of contextual education, it is suggested to focus on the dominance of certain methods and forms of work, which, in turn, makes it possible to distinguish different types of the general nature of the direction of the educational process, namely the following:

1. Project – the implementation of certain educational practical projects.

2. Targeted – creation of conditions under which students realize and accept the learning goals as personally significant, independently and systematically carry out planned work on the realization of the set goals: select and study the necessary theoretical material, analyze and systematize the information received, perform practical tasks, etc.

3. Research – performing creative, research and practical own research [126; 230].

The basis for the implementation of the contextual approach is a specially organized activity (educational, quasi-professional and professional), in the conditions of which subject and social contexts are modeled, which complement each other and gradually change each other.

The student's educational activity is subject to the formation of his system of knowledge, skills, and abilities. A feature of the implementation of contextual education is the emphasis on the professional aspect of the information provided, drawing the attention of the participants of the educational process to debatable issues, current and unsolved problems, appealing to the opinion of people as future specialists, stimulating each of them to develop their own, well-founded position on various topical issues. As a result, the learning process acquires a personal, subjective meaning, and knowledge goes beyond abstract theory.

Quasi-professional activity is carried out through the wide use of simulation models in education, which reproduce certain professional tasks and situations. The successful solution of the proposed practical and professional tasks contributes to the actualization of the acquired knowledge by the acquirers, the formation in them of the skills of applying this knowledge in practice, the formation and development of skills for future professional activity. In conditions of simulated professional activity, students perform certain professional duties and functions in a real format [28; 102; 113].

The implementation of the contextual approach during the study of the problem of the formation of information competence of foreign students of medical specialties involves the reproduction in the educational process of the subject and social content of the future professional activity. This is done through the use of simulation teaching methods that reproduce the professional and practical realities of the future profession in a conventional format: simulation exercises, modeling of specific practical situations, situational tasks, game design, etc. Education, close to real conditions, allows a person to better

understand the features of future professional activity, forms a responsible attitude to acquiring knowledge, actualizes the orientation of the individual towards self-development, self-improvement, and self-realization. At the same time, this synthesis of educational and professional activities creates conditions for the effective development and improvement of practical skills necessary for a future medical worker, as well as ways of building constructive communication in accordance with professional norms and rules of communication.

An important component of quasi-professional training is the familiarization of students with the resources of medical information systems (a complex of accumulation and preservation of systematized information necessary for the automation and information support of diagnostic and treatment processes), medical computer systems (perform long-term monitoring of a person's health according to certain indicators: temperature body, blood pressure, heart rate, etc. to detect the dynamics of the state of physiological systems), medical hardware systems (robots that perform certain actions at various stages of diagnosis and treatment of a person). This will contribute to a better adaptation of the future medical worker to the performance of professional activities in the conditions of intensive development of information and technological capabilities of modern medicine.

2.2 The concept of information competence formation in international medical students in the educational environment of the university

On the basis of scientific and reference literature analysis it is determined that the term "concept" refers to general scientific literature and is widely used by specialists in different scientific areas. In accordance with the subject of scientific knowledge, the goals and objectives of the scientific process, the

essence and content of the given definition are determined, which determines the wide range of its interpretations, namely the definition of the concept as:

- a basic idea, a general opinion that determines the character, content of something [145; 229; 18; 33];

- a set of factors that determine the content and nature of the functioning of certain structures, processes, systems [50];

 a system of views on certain phenomena, processes occurring in nature, society, a way of understanding and interpreting events, process phenomena [198; 43; 131; 137; 165];

- an approach to solving the current problem, which determines the nature and direction of search activity [200; 180];

 a theory that allows you to study the essence, content of a certain phenomenon, process, trace the regularities of its development, peculiarities of functioning [63; 226];

- a form of scientific knowledge [145; 165];

- a complex of theoretical and methodological knowledge about the object of research [51, p. 160];

- description of the investigated phenomenon, process, its content, structure, features of functioning [51; 33].

- In the study, we share the generalizing conclusions of M. Demyanchuk, who understands the term "concept" as a certain general, defining the idea of a specific study or a way of presenting the results of a study [51, p. 160].

- Based on the study of scientific literature, the characteristic features of the concept as a phenomenon were identified, which are manifested in:

- systematization of scientific knowledge, in-depth study of the problem;

 highlighting controversial issues, not thoroughly developed, littlestudied aspects of the investigated problem;

- building a complete scientific picture in the plane of specific research;

implementation of the researcher's personal knowledge, a certain form of subjectification of scientific knowledge;

explanation of a certain scientific theory, substantiated proof of its specific provisions;

interconnection and interdependence with other forms and methods
 of scientific knowledge: hypothesis, theory, idea, problem;

- determination of the main research idea, strategy of research work;

- supported by empirical data, results of experimental work;

- focus on achieving results [39; 33; 161; 4; 3].

In the course of our research, the definition of the concept of "pedagogical concept" is of particular interest, which is considered as a system of views on a certain pedagogical phenomenon or process, the determination of ways of improvement, the prospects for the development of the specified phenomenon or process, the author's vision of solving the current problems of pedagogical reality [218; 39; 33].

The conclusions of scientists who identified the following main stages of developing a pedagogical concept were also useful:

1. Theoretical – study of scientific theories, domestic and foreign experience, analysis, systematization of scientific and theoretical knowledge, substantiation of basic scientific ideas on the research problem. Justification of the content and structure of the concept.

2. Methodological – the study of the problem at the level of philosophical, general scientific and specific scientific approaches to define and justify the main ideas and provisions, establish pedagogical regularities.

3. Empirical – the construction of a coherent, logical system of pedagogical facts that substantiate the content, essence, peculiarities of the functioning of the phenomenon under investigation, analysis of the effectiveness of the result of the pedagogical process in accordance with the implemented concept, determination of the conditions for its successful implementation [226; 218; 147].

As was established in the research, the pedagogical concept has its own structure. Thus, the author's concept of O. Chubrey unites the following components:

– general provisions;

- conceptual and categorical apparatus;
- theoretical and methodological foundations;
- core;
- content and meaning filling;

pedagogical conditions for effective functioning and development of the studied phenomenon;

- verification of formulated ideas [218, p. 130].

In his research, M. Demyanchuk substantiated the following structure of the concept of professional training of future junior nursing specialists in colleges:

general provisions;

- theoretical and methodological foundations;
- the core of the concept;
- the content and meaning of the concept [218, p. 161-162].

Therefore, summarizing the theoretical conclusions of scientists regarding the development and structure of the pedagogical concept, we foresee the following structural components in the author's concept of the formation of information competence of foreign students of medical specialties in the

educational space of the university: general provisions, conceptual and categorical apparatus, theoretical and methodological foundations, the core of the concept, content- meaningful content of the concept.

Let's reveal the essence of each component in more detail. The *general provisions* concept presents the purpose and tasks of the concept, its legal basis, its place in pedagogical theory and its significance for pedagogical practice.

The author's concept represents a complete body of knowledge about the studied phenomenon and is characterized by:

- the complexity of theoretical knowledge about the process of formation of information competence, which are distinguished by the dualism of objective and subjective, relativity, selectivity, multifunctionality and variability;

- the complex structure of the system of knowledge about the subject of research, the presence of a wide arsenal of connections, multi-vector interaction between them;

- the logical integrity and independence of each structural component of the concept;

– dynamism, the knowledge system is supplemented with new theories, provisions, facts and adjusted in accordance with the vector of society's development, global scientific and social standards and educational priorities;

– focus on achieving results.

We define the purpose of our concept as the substantiation of the theoretical, methodical and methodological foundations of the formation of information competence of foreign students of medical specialties in the educational space of the university.

The purpose of the concept is specified in the following tasks:

1. To analyze and substantiate the theoretical provisions of the process of formation of information competences of foreign students of medical specialties.

2. To determine methodological approaches to the formation of informational competences of foreign students of medical specialties.

3. Develop a methodology for the formation of information competences of foreign students of medical specialties

When developing the author's concept of formation of information competences of foreign students of medical specialties, we took into account a number of factors that determine the content and directions of training of medical workers in higher education institutions of Ukraine:

- intensive development of the processes of informatization, internetization of society, integration of information technologies with the scientific, industrial, and educational spheres of society, which determined a fundamentally new model of life and communication in all spheres of society;

 modernization of the educational sector in accordance with modern challenges, filling the educational space of higher education institutions with an informational context, introducing information technologies, multimedia tools in the learning process;

- a high level of informatization of the activities of health care institutions, the development of the medical services market in accordance with new opportunities provided by the use of information technologies: medical information systems, information databases, simulation medical models, etc.

- the needs of an individual who, for successful activity in a society characterized by the intensive development of produced information, needs to possess at a high level the skills of choosing, processing the necessary information, and using a wide arsenal of information resources and means.

Legal basis concepts the formation of informational competence of foreign students of medical specialties consisted of:

 basic normative legal documents in the field of education: Laws of Ukraine "On Education" and "On Higher Education", Decree of the President of Ukraine "On Improvement of Higher Education in Ukraine";

- regulatory and legal documents regulating the training of foreign citizens in higher education institutions of Ukraine: Order of the Cabinet of Ministers of Ukraine "Plan of measures to popularize opportunities for obtaining higher education in Ukraine for foreign students until 2025", Order of the Ministry of Education and Science of Ukraine "Some issues of organization recruitment and training (internship) of foreigners and stateless persons", Resolution of the Cabinet of Ministers of Ukraine "On training of foreign citizens in Ukraine";

- documents defining the strategic development of informatization of education: the Law of Ukraine "On the national program of informatization", the Law of Ukraine "On the main principles of the development of the information society in Ukraine for 2007-2015", Decree of the Cabinet of Ministers of Ukraine "On the approval of the strategy for the development of the information society in Ukraine", National Strategy development of the information society in Ukraine;

- documents that regulate the activities of higher medical education institutions in Ukraine: Decree of the Cabinet of Ministers of Ukraine "Strategy for the Development of Medical Education in Ukraine", Resolution of the Cabinet of Ministers of Ukraine "Regulations on the Organization of the Educational Process in Health Care Institutions with the Participation of Scientific and Pedagogical Workers of Higher Education Institutions of education providing training of higher education seekers in the field of health care", Resolution of the Cabinet of Ministers of Ukraine "On approval of the list of specialties for which training of higher education seekers is carried out according to the degrees (educational qualification levels) of junior specialist, bachelor, specialist, master".

The *conceptual and categorical apparatus* of the concept presents the author's acceptance or interpretation of the concepts: "didactic system", "formation", "competence".

Thus, we consider the didactic system as a whole set of components that are connected by a wide network of regular connections with each other, with other subsystems and systems of different levels and hierarchies.

By formation we understand the process and result of purposeful and spontaneous influences of social reality [111, p. 8].

Competence is defined as an integrated characteristic that unites a system of knowledge, abilities, skills, and attitudes that determine an individual's ability to carry out a certain type of activity at a high professional level, to successfully perform the necessary functions, which will ensure the effective solution of current problems in a specified professional field or other type activity [150, p. 73].

The theoretical-methodological basis of the concept was made up of scientific-theoretical provisions, ideas, theories that reflected the content of basic concepts, made it possible to understand and understand the essence, characteristics, and peculiarities of the problem of forming information competence of foreign students of education in medical specialties and methodological approaches, on the basis of which the research was carried out.

When substantiating the theoretical foundations of the researched problem, the trends in the development of medical education were taken into account, which are determined by:

 the transition from an industrial to an information society determines the valuable status of information resources. According to the Law of Ukraine "On the National Informatization Program", informatization is defined as a set of interconnected organizational, legal, political, socio-economic, scientific-

technical, production processes aimed at creating conditions for meeting the information needs of citizens and society based on the creation, development and use of information systems, networks, resources and information technologies, which are built on the basis of the use of modern computing and communication technology [156]. Informatization processes cover all spheres of social life, define fundamentally new models of social behavior and communication, modernize the content, organization, and methods of various types of industrial, educational, cultural, and health protection activities. The needs of development and improvement of information technologies and information systems, raising the level of computer and information literacy of the population come to the fore;

– informatization of the educational sphere, which involves the creation of new educational technologies, modernization of organizational forms and teaching methods, enrichment of the methodological base for the use of information, computer, communication, multimedia technologies and a network of information resources, improvement of material and technical support for educational activities of higher education institutions, integration of national scientific and educational information network into the world scientific and informational educational space. Priority tasks are defined as: formation and development of the information resources (multimedia technologies, remote technologies, etc.); wide use of information, computer, multimedia teaching tools; improving the qualifications of the teaching staff in accordance with the modern requirements of confident mastery of the means and methods of work in the information and educational space;

- intensive development of the national health care system, characterized by the improvement of medical technologies, innovative products and their wide implementation in practical activities, the development of an

information system for the management of medical institutions, the informatization of the professional activity of doctors: the creation and use of a medical information system, telemedicine, information and computer computer diagnostics, medical expert and hardware-computer systems, innovative treatment technologies.

The creation of a complete system of knowledge about the researched phenomenon, the establishment of relationships between its individual components and the determination of the nature of these relationships led to the implementation of analysis, synthesis, systematization and generalization of individual facts, phenomena, processes that determined:

peculiarities of the organization of the educational process for foreign students in institutions of higher education of Ukraine, problems of adaptation and socialization of students, pedagogical support (O. Adamenko, O. Bilyk, O. Bilous, Yu, Boychuk, K. Burakova, O. Kalenyk, T. Kononova, I. Kotovska, I. Krytskyi, Ya. Lukatska, A. Osypenko, O. Palka, D. Plynokos, D. Poroh, Zh. Ragrina, O. Szegeda, I. Semenenko, V. Streltsova, L. Subota, T. Shmonina, I. Shteimiller);

problems of improving the quality of medical education
(N. Voloshchuk, O. Denisyuk, V. Dvornyk, V. Zhdan, A. Melnyk, I. Melnikova,
I. Melnychuk, M. Romantsov, O. Pashinska, A. Sayenko, O. Semenenko ,
I. Starchenko, M. Shumylo, O. Yatsyshina);

the question of the formation of competences among students of higher education (V. Artemenko, I. Voloshina, O. Eremenko, N. Eremenko, O. Ignashuk, I. Kogut, D. Kostenko, V. Litovka, N. Lobach, A. Myhal;

problems of using information technologies in the educational process, the organization of distance and mixed learning (V. Andrievska, N. Veselovska, M. Voloshyn, I. Hetmanyuk, R. Gurevich, M. Dovbysh, M. Kademiya, T. Klymenko, I. Koreneva, Shuturma, L. Shevchenko, M. Shcherbakov, L. Yushchenko);

issues of organization and development of the educational space, educational environment, determination of its structural components and their content, clarification of the design features of this environment in a higher education institution (V. Bobirov, S. Bilash, O. Belyaeva, M. Bratko, I. Gaba, O. Dubasenyuk, V. Zhdan, V. Zhelanova, E. Zaredynova, O. Kabatska, A. Katashov, N. Kononets, M. Ovchinnikova, L. Ostapenko, G. Polyakova, N. Stuchynska, Yu. Tkachenko, I. Kharchenko, O. Tsyunyak, I. Shishenko, M. Shishkina, O. Yaroshynska).

 Methodological foundations of the concept the formation of information competences of foreign students of medical specialties have become approaches:

system-synergistic, from the standpoint of which the didactic system of formation of information competence of foreign students of medical specialties is considered as a complex, open, non-linear integrity, which is in a state of self-development and is characterized by a wide network of regular connections between its individual components, subsystems and between systems of different levels and hierarchies. Its development is ensured by interaction between individual components, dynamic connections with the environment. The integrity of the system of formation of information competence of foreign students of medical specialties is ensured by the interaction of its components (purpose, task, content of education, methods and forms of organizational educational work, peculiarities of the contingent of students, teaching staff, set of normative documents regulating the content and structure of educational activities, content and directions of higher education activities, etc.), each of which has its own place, functions, role and a certain nature of relationships and determines the effectiveness of the system as a whole;

- cultural, which requires taking into account the peculiarities of the contingent of recipients as subjects of a certain culture, bearers of their own

national cultural values. The educational environment of the university acts as an environment for the formation and development of intercultural communication skills, creates conditions for the assimilation of new cultural meanings, for national and cultural enlightenment, exchange and assimilation of the historical and cultural experience of different nationalities and peoples. Attention is focused on the formation of positive attitudes towards other cultures, the ability to level national and cultural differences in communication, interaction, and learning;

– axiological, which is aimed at forming a system of general, socially significant and professional values, important for the future specialist, in the acquirers. Declaring a student's personality as the highest value requires ensuring conditions for his comprehensive development, maximum realization of his personal and professional potential, creation of opportunities for selfreflection of students, their self-determination and self-development in accordance with their own professional and individual needs. The possibilities of directing the educational process, the content of education to the actualization of the value attitude to the acquisition of information competence are also determined;

– competence-based, which involves a shift of emphasis from the priorities of acquiring knowledge in the field of information technologies, theoretical training of the acquirer to the process of his practical activity in the information, communication and medical spheres. The requirements for training a specialist capable of successfully and effectively solving a wide range of tasks, demonstrating a high level of mastery of practical methods of using information technologies, communication systems in educational and professional activities are put forward;

- personality and activity-oriented, according to which the formation of information competence of students takes place on the basis of taking into account their personal qualities, individual characteristics. For the full

realization of students' personal potential, conditions (organizational, psychological, educational) were created that allowed everyone to realize and improve their own level of information competence;

– environmental, the use of which involves taking into account the possibilities of the educational space of the university to solve the tasks, which acts as an educational, organizational, communication basis for the activities and communication of the students. Attention is focused on the peculiarities of the organization and development of the educational environment of the university, its creation in accordance with the requirements of innovation, creativity, improvement of interdisciplinary relations, the use of information technology tools to increase the effectiveness of the formation of information competences of medical students;

– hermeneutic, which allows ensuring adequate perception and understanding of the received information by foreign students, its correct interpretation and understanding. Attention is focused both on making a correct translation from one language to another, and on understanding the meaning of the translated information and the possibility of interpreting it, subjecting it with new meanings;

– contextual, which led to the reproduction in the educational process of the content of informational and communicative activities of the students in the educational, social and professional spheres. This was done by strengthening the information-contextual component of the content of education, digitization of educational materials, application of forms and methods of education that require actualization of skills for working in the information space, encouraging students to work independently, aimed at finding and analyzing information, using information tools and learning technologies.

The core of the concept consists of regularities and principles of formation of informational competence of foreign students of medical specialties, determined as a result of theoretical and methodological analysis of

the problem, which reflect the nature of connections between the structural components of the studied phenomenon, its characteristic properties, features of functioning and development.

As it is well known, regularities are objective, constant connections between separate phenomena, aspects of the pedagogical process, which manifest themselves constantly, systematically, and taking into account which ensures the effectiveness and efficiency of the specified process. There are objective (determined by the very essence, logic of the pedagogical process) and subjective (determined by the specifics of specific tasks, conditions of implementation of this process, manifested in its individual aspects) [188; 128].

On the basis of taking into account the regularities, we singled out two groups of principles: general didactic: systematicity and systematicity, visibility, awareness, scientificity, individualization and differentiation of education and specific ones: professional orientation, taking into account the mental characteristics of future specialists, activity and interactivity, integration and interdisciplinary coordination.

The first group reflects integrity of the concept, objective laws of implementation of the process of formation of information competence of the acquirers, factors and connections with the social environment that determine its essence, content, character and logic of flow.

The second group of principles is related to the specifics of the organization and implementation of the specified process, taking into account the individual and national-cultural characteristics of the students, their opportunities for full-fledged scientific and social communication, the influence of external conditions (pedagogical, methodological, organizational, technical) of the organization of the educational process and communication.

The content and meaning of the concept of formation of information competence of foreign students of medical specialties reflects the basic conceptual ideas of the organization of the specified process, highlights the

author's position regarding the implementation of theoretical provisions, the possibilities of using the results of scientific-theoretical and methodological analysis in practice.

So, on the basis of the conducted scientific and theoretical analysis, taking into account the prospects and trends of the development of medical education, we determined the following conceptual ideas of our research:

1. Informatization of the medical field determines the significant modernization of all components of the activities of health care institutions.

2. The system of higher medical education is aimed at training a highly qualified specialist who confidently possesses modern scientific knowledge in the field of medicine, has formed skills and improved methods of practical activity in the field of information technologies and medical resources, formed information competence.

3. The educational environment of the institution of higher medical education creates opportunities for the formation and development of information competence of future specialists.

The success of the formation of information competence of foreign students of medical specialties is ensured by the fulfillment of pedagogical conditions:

1. Implementation of technological and methodical training of teachers for the formation of information competence of future foreign doctors.

2. Enrichment of the educational environment of the medical education institution with innovative technical means of learning, educational resources and technologies, taking into account modern requirements for medical workers.

3. Involvement of foreign students in the self-diagnosis of the achieved level of formation of information competence and the process of mastering it.

Literature to chapter 2

1. Андрощук І. В. Наукові підходи до підготовки майбутніх вчителів технологій як суб'єктів педагогічної взаємодії. *Науковий часопис Національного педагогічного університету імені М. П. Драгоманова. Серія* 5. Педагогічні науки: реалії та перспективи : зб. наук. пр. / М-во освіти і науки України, Нац. пед. ун-т імені М. П. Драгоманова. Київ: Вид-во НПУ ім. М. П. Драгоманова, 2016. Вип. 54. С. 14–19.

2. Андрощук I. В. Реалізація системного підходу в навчальному процесі як педагогічна проблема. *Проблеми підготовки сучасного вчителя*. 2013. № 7. С. 8–14.

3. Андрущенко В. П. Історія соціальної філософії (західноєвропейський контекст). Київ: Тандем, 2000. 406 с.

4. Андрущенко В. П., Михальченко М. І. Сучасна соціальна філософія: курс лекцій [для студ. вузів]. Вид. 2-ге, випр. й допов. Київ: Генеза, 1996. 368 с.

5. Аніщенко В., Падалка О. Культурологічний підхід у професійній підготовці вчителя. *Освіта дорослих: теорія, досвід, перспективи*. 2013. № 6. С. 103–107.

6. Бакуменко Р., Ягупов В. Вимоги сучасних методологічних підходів до організаційно-педагогічних умов розвитку професійної компетентності фахівців інформаційно-аналітичного забезпечення. *Актуальні питання гуманітарних наук* : міжвуз. зб. наук. пр. молодих вчених Дрогобицького держ. пед. ун-ту імені Івана Франка. 2020. Вип 29, т. 1. С. 160–168.

7. Бастун М. В. Культурологічний підхід в освіті та його психолого-педагогічне забезпечення. *Горизонти освіти.* 2012. Вип. 3 (2) (36). С. 170–175. URL: https://lib.iitta.gov.ua/6594/1/Bastun_6.pdf (дата звернення: 17.10.2022).

8. Безбородих С. М. Особистісно-діяльнісний підхід у розвитку конкурентоспроможного педагога. *Науковий вісник Ужгородського університету : Серія: Педагогіка. Соціальна робота /* гол. ред. І. В. Козубовська. Ужгород : Говерла, 2013. Вип. 28. С. 19–21.

9. Березюк О. С. Системний підхід до формування полікультурної компетентності майбутніх фахівців у сучасному освітньому просторі. *Професійна педагогічна освіта: системні дослідження* : монографія / за ред. О. А. Дубасенюк. Житомир : Вид-во ЖДУ ім. І. Франка, 2015. С. 193–209.

10. Берека В. Є. Формування базових компетентностей у процесі підготовки майбутніх учителів фізики. *Збірник наукових праць Кам'янець-*Подільського національного університету ім. Івана Огієнка. Серія: Педагогічна. 2018. Вип. 24. С. 53–55. URL: http://nbuv.gov.ua/UJRN /znpkp_ped_2018_24_16 (дата звернення: 11.08.2022).

Бетти Э. Герменевтика как общая методология наук о духе / пер. с нем.: Е. В. Борисов. Москва: Канон+; РООИ Реабилитация, 2011.
 144 с.

12. Бех І. Д. Виховання особистості: у 2-х кн. Кн. 1. Особистісно орієнтований підхід: теоретико-технологічні засади. Київ: Либідь, 2003. 278 с.

13. Бех І. Д. Компетентнісний підхід у сучасній освіті. *Педагогіка* вищої школи: методологія, теорія, технологія. Київ: Генезис, 2009. С. 21–24.

14. Бех І. Д. Особистісно-зорієнтоване виховання: наук.-метод. посіб. Київ: ІЗМН, 1998. 204 с.

15. Бібік Н. М. Компетентнісний підхід: рефлексивний аналіз застосування. Компетентнісний підхід у сучасній освіті: світовий досвід та українські перспективи: Бібліотека з освітньої політики / [за заг. ред. О. В. Овчарук]. Київ: К.І.С., 2004. С. 47–52.

16. Бібік Н. М. Компетентність у навчанні. *Енциклопедія освіти /* Акад. пед. наук України; гол. ред. В. Г. Кремень. Київ: Юрінком Інтер, 2008. 1040 с.

17. Бігун В. С. Людина в праві: аксіологічний підхід : автореф. дис. ... канд. юрид. наук: спец. 12.00.12 «Філософія права» / Нац. акад. внутр. справ України MBC України. Київ, 2004. 19 с.

18. Біленька Н. В., Крикус О. Ю. Організація та проведення науково-дослідної роботи у системі підготовки молодших медичних спеціалістів. *Магістр медсестринства*. 2018. № 1 (19). С. 7–10.

19. Білоус О. С. Системний підхід у формуванні творчої активності майбутнього педагога. *Вісник Дніпропетровського університету імені А. Нобеля.* Серія «Педагогіка і психологія». Педагогічні науки. 2015. № 1(9). С. 227–232.

20. Бованенко О. О. Аналіз наукових підходів до визначення «естетична» та «художня культура» у працях вітчизняних та зарубіжних дослідників. *Науковий часопис НПУ імені М. П. Драгоманова. Сер. №11. Соціальна робота. Соціальна педагогіка*: зб. наук. пр. Київ: Вид-во НПУ ім. М. П. Драгоманова, 2017. Вип. 23. С. 3–8.

21. Бойко О. Герменевтичний підхід до вивчення явищ етнопедагогіки. *Психолого-педагогічні проблеми сільської школи*. 2014. Вип. 50. С. 56–62. URL: http://nbuv.gov.ua/UJRN/Ppps_2014_50_11 (дата звернення: 19.10.2021).

22. Бойчук Ю. Д. Культурологічний і аксіологічний підходи до формування еколого-валеологічної культури студентів вищих навчальних закладів. Вісник НТУ України «Київський політехнічний інститут». Філософія. Психологія. Педагогіка: зб. наук. пр. / Нац. техн. ун-т України «Київ. політехн. інт»; гол. ред. Б. В. Новіков. Київ : ІВЦ «Політехніка», 2009. Вип. 3, ч. 1. С. 123–126.

23. Брудный А. А. Психологическая герменевтика. Москва: Лабиринт, 2005. 336 с.

24. Бухальська С., Мельничук О. С. Компетентнісно зорієнтований розвиток студента в системі навчально-виховної та методичної роботи медичного коледжу як умова модернізації вищої медичної освіти. *Нова педагогічна думка*. 2014. № 3. С. 21–24.

25. Важинський С. Е. Щербак Т. І. Методика та організація наукових досліджень: навч. посіб. Суми: СумДПУ імені А. С. Макаренка, 2016. 260 с.

26. Важливість контролю якості підготовки студентів у вищих навчальних медичних закладах / С. М. Цвіренко та ін. *Актуальні питання контролю якості освіти у вищих медичних навчальних закладах*: матеріали наук.-практ. конф. з міжнар. участю (м. Полтава, 22 березня 2018 р.). Полтава : РВВ УМСА, 2018. С. 236–238.

27. Варенко Т. К. Аксіологічний підхід та доцільність його реалізації в сучасній системі вищої педагогічної освіти. *Педагогіка формування творчої особистості у вищій і загальноосвітній школах*. Запоріжжя: Класичний приватний університет, 2010. Вип. 11 (64). С. 161–164.

28. Вербицький А. А., Ларионова О. Г. Личностный и компетентностный подходы в образовании: проблемы интеграции. Москва: Логос, 2010. 336 с.

29. Винничук Р. В. Аксіологічний та культурологічний підходи як аспекти методології сучасної підготовки фахівців у вищій школі. *Молодий вчений*. 2018. № 2.2 (54.2). С. 93–96.

30. Вінтюк Ю. В. Системний підхід до формування професійної компетентності майбутніх психологів. *Молодий вчений*. 2017. № 5. С. 296–300. URL: http://nbuv.gov.ua/UJRN/molv_2017_5_71 (дата звернення: 13.11.2021).

31. Вітвицька С. С. Аксіологічний підхід до виховання особистості майбутнього вчителя. *Креативна педагогіка* / Академія міжнар. співробітництва з креативної педагогіки. Вінниця, 2015. Вип. 10. С. 63–67.

32. Вітвицька С. С. Системно-синергетичний підхід до педагогічної підготовки майбутніх магістрів освіти. *Професійна педагогічна освіта:системні дослідження*: монографія / за ред. О. А. Дубасенюк. Житомир: Вид-во ЖДУ імені Івана Франка. 2015. С. 92–108.

33. Вітвицька С. С. Термінологічна система педагогіки вищої школи – основа формування, поглиблення, збагачення педагогічних знань студентів магістратури. *Професійна педагогічна освіта: становлення і розвиток педагогічного знання*: монографія / за ред. проф. О. А. Дубасенюк. Житомир : Вид-во ЖДУ ім. І. Франка, 2014. С. 107–139.

34. Внукова О. М. Методологічні засади професійної освіти: навч. посіб. для студ. напрямів підготовки 6.010104 Професійна освіта (Технологія виробів легкої промисловості), 6.010104 Професійна освіта (Дизайн). Київ: КНУТД, 2015. 198 с.

35. Вольфовська Т. Комунікативна компетентність молоді як одна з передумов досягнення життєвої мети. *Шлях освіти.* 2001. № 3. С. 13.

36. Ганич Д. І. Олійник І. С. Словник лінгвістичних термінів. Київ: Вища школа, 1985. 321 с.

37. Герасимчук А. А., Палеха Ю. І., Шиян О. М. Соціологія: [навч. посіб.]. 4-е вид., випр. й доп. Київ: Вид-во Європ. ун-ту, 2004. 246 с.

78. Гірц К. Інтерпретація культур: вибрані есе. Київ: Дух і Літера,
 2001. 542 с.

39. Гладуш В. А., Лисенко Г. І. Педагогіка вищої школи: теорія, практика, історія : навч. посіб. Дніпропетровськ, 2014. 416 с.

40. Глузман О. В. Базові компетентності : сутність та значення в життєвому успіху особистості. *Педагогіка і психологія*. 2009. № 2. С. 51–61.

41. Гнатовська К. Культурологічний підхід як засіб формування толерантності майбутніх фахівців. *Гірська школа Українських Карпат.* 2020. № 23. С. 96–100. URL: https://doi.org/10.15330/msuc.2020.23.96-100 (дата звернення: 17.10.2022).

42. Гомеля Н. С. Методологічні засади особистісного підходу в освіті. Освіта дорослих: теорія, досвід, перспективи. 2014. Вип. 1. С. 27–33.

43. Гончаренко С. У. Український педагогічний словник. Київ: Либідь, 1997. 376 с.

44. Гриньова В. М. Культурологічний підхід в педагогіці. *Гуманітарні науки*. 2013. № 1. С. 8–14.

45. Гуменна Н. В. Компетентнісний підхід у викладанні дисципліни «Медичне правознавство». *Молодий вчений*. 2017. № 4 (44). С. 356–361.

46. Гуменний С. Еволюція герменевтичних ідей від античності до Нового часу. *Магістр.* 2016. Вип. 24. С. 130–133.

47. Ґадамер Г.-Г. Герменевтика і поетика. Київ : Юніверс, 2001. 288 с.

48. Данилова Г. С. Управління процесом становлення професійної компетентності методиста. Київ: УІПКККО, 1995. 80 с.

49. Данильян О. Г., Тараненко В. М. Філософія : підручн. 2-ге вид., допов. і переробл. Харків: Право, 2012. 312 с.

50. Демінська Л. О. Аналіз основних положень аксіологічної науки у філософському та педагогічному аспекті. *Педагогіка, психологія та медико-біологічні проблеми фізичного виховання*. 2011. Вип. 11. С. 41–44.

51. Демянчук М. Р. Теорія і практика професійної підготовки майбутніх молодших спеціалістів сестринської справи у коледжах: автореф. дис. ... д-ра пед. наук : 13.00.04 / Хмельниц. гуманіт.-пед. акад. Хмельницький, 2021. 492 с.

52. Державний стандарт базової середньої освіти / Міністерство освіти і науки України. URL: https://mon.gov.ua/ua/osvita/zagalna-serednya-osvita/nova-ukrayinska-shkola/derzhavnij-standart-bazovoyi-serednoyi-osviti (дата звернення: 14.11.2022).

53. Державні стандарти професійної освіти: теорія і методика: монографія / за ред. Н. Г. Ничкало. Хмельницький: ТУП, 2002. 334 с.

54. Джаман Т. Реалізація середовищного й інклюзивного підходів до навчання в контексті інклюзивної освіти як умова євроінтеграції. *Social Work and Education*. 2020. Vol 2, No 29. P. 150–155.

55. Довгопола Л. Методологічні підходи до вивчення проблеми формування готовності майбутніх учителів біології до професійної діяльності В процесі практичної підготовки. Актуальні питання 2018. Вип. 22(1). C. 116-122. URL: гуманітарних наук. http://nbuv.gov.ua/UJRN/apgnd_2018_22(1)__24 (дата звернення: 18.11.2022).

56. Доротюк В. І. Діагностика індивідуальних відмінностей учнів загальноосвітньої школи при комплектуванні профільних класів : автореф. дис. … канд. психол. наук: спец. 19.00.07 «Педагогічна та вікова психологія». Київ, 2001. 17 с.

Компетентнісний 57. Дубасенюк О. А. підхід y професійній підготовці Формування естетичної вчителя. компетентності народознавства: особистості засобами зб. наук. праць молодих дослідників / [за заг. ред. О. С. Березюк, Л. О. Глазунової]. Житомир : Видво ЖДУ ім. І. Франка, 2010. С. 10-16.

58. Дубасенюк О. А. Концептуальні підходи до професійнопедагогічної підготовки сучасного педагога. Житомир: Вид-во ЖДУ ім. І. Франка, 2011. 114 с.

59. Дубасенюк О. А. Наукові підходи до освіти дорослих. *Теорія і* практика професійної майстерності в умовах цілежиттєвого навчання:

монографія / за ред. О. А. Дубасенюк. Житомир: Вид-во Рута, 2016. С. 155–167.

60. Дубасенюк О. А. Ціннісно-смислові наукові підходи, що відображають феномен толерантності. *Толерантність як соціогуманітарна проблема сучасності*: зб. матеріалів Міжнарод. наук. теорет. конф. (1-2 жовтня 2015 р.) / редкол. П. Ю. Саух [та ін.]. Житомир: Вид-во Евенок О. О., 2015. С. 305–309.

61. Дубковецька І. І. Розвиток професійної компетентності майбутніх медичних працівників в умовах євроінтегрування. Освітні обрії.
2020. Т. 50, № 1. С. 154–159.

62. Дудник І. М. Вступ до загальної теорії систем : навч. посіб. Київ: Кондор, 2009. 205 с.

63. Енциклопедія освіти / Акад. пед. наук України; голов. ред.В. Г. Кремень. Київ : Юрінком Інтер, 2008. 1040 с.

64. Енциклопедія постмодернізму / за ред. Ч. Вінквіста, В. Тейлора; пер. з англ. В. Шовкун; наук. ред. пер. О. Шевченко. Київ: Вид-во Соломії Павличко "Основи", 2003. 503 с.

65. Єріна А. М. Методологія наукових досліджень: навч. посіб. Київ, 2004. 212 с.

66. Жалдак М. І., Хомік О. А. Формування інформаційної культури вчителя. URL: http://www.icfcst.kiev.ua/SYMPOSIUM/Proceedings /Galdak.doc (дата звернення 11.06.2019).

67. Желанова В. В. Наукові підходи у дослідженні феномену контекстного навчання майбутнього вчителя початкових класів. *Проблеми сучасної педагогічної освіти. Педагогіка і психологія.* 2013. Вип. 39(1). С. 193–199. URL: http://nbuv.gov.ua/UJRN/pspo_2013_39%281%29__32 (дата звернення: 17.11.2021).

68. Життєва компетентність особистості: від теорії до практики: [наук.-метод. посіб.] / [за ред. І. Г. Єрмакова]. Запоріжжя : Центріон, 2005.
640 с.

69. Журавський В. Системний підхід до навчання у процесі підвищення кваліфікації кадрів податкової служби. *Збірник наукових праць УАДУ*; за заг. ред. В. І. Лугового, В. М. Князева. Київ: Вид-во УАДУ, 2000. Вип. 2, ч. IV. С. 341–346.

70. Зайченко І. В. Педагогіка : навч. посіб. [2-е вид.]. Київ : Освіта України. КНТ, 2008. 528 с.

71. Закирова А. Ф. Основы педагогической герменевтики: авторский курс лекций: учеб. пособие. Тюмень, Изд-во Тюменского гос. ун-та, 2011. 324 с.

72. Заредінова Е. Р. Сутнісна характеристика середовищного підходу до сучасної вищої освіти. *Етика і естетика педагогічної дії.* 2017. Вип. 16. С. 35–45.

73. Затверджені стандарти вищої освіти / Міністерство освіти і науки України. URL: https://mon.gov.ua/ua/osvita/visha-osvita/naukovo-metodichna-rada-ministerstva-osviti-i-nauki-ukrayini/zatverdzheni-standarti-vishoyi-osviti (дата звернення: 14.11.2022).

74. Зязюн І. Аксіологічні ресурси педагогічної дії вчителя. *Естетика і етика педагогічної дії.* 2011. Вип. 1. С. 9–24. URL: http://nbuv.gov.ua/UJRN/eepd_2011_1_5 (дата звернення: 17.10.2022).

75. Зязюн І. А. Філософія педагогічної дії : монографія. Черкаси: Вид-во ЧНУ імені Богдана Хмельницького, 2008. 608 с.

76. Іванькова Н. А. Формування змісту інформаційнокомунікаційної компетентності майбутніх лікарів як елемента їхньої професійної підготовки. URL: http://www.chasopys.ps.npu.kiev.ua /archive/66-2019/22.pdf (дата звернення: 18.10.2022). 77. Ільницька О. М., Попович З. Б. Сучасні підходи до вищої медичної освіти України. *Педагогічні науки*. 2017. Вип. 133. С. 90–96.

78. Історична наука: термінологічний і понятійний довідник: навч. посіб. / В. М. Литвин [та ін.]. Київ: Вища шк., 2002. 430 с.

Кабацька О. В. Система формування здоров'язбережувального освітнього середовища в класичних університетах: дис. ... д-ра пед. наук;
 13.00.07 – теорія та методика виховання (011 – Освітні, педагогічні науки).
 Старобільськ, 2021. 527 с.

80. Казаков Ю. М., Петров Є. Є., Треумова С. І. Компетентнісний підхід як засіб підвищення якості вищої медичної освіти. *Удосконалення якості підготовки лікарів у сучасних умовах:* матеріали наук.-практ. конф. з міжнар. участю. Полтава, 2016. С. 82–83.

81. Кайдалова А. В., Посилкіна О. В. Науково-теоретичне обґрунтування методологічного концепту побудови системи якості вищої фармацевтичної освіти. *Фармацевтичний часопис*. 2016. № 3. С. 68–74. URL: http://nbuv.gov.ua/UJRN/Phch_2016_3_14 (дата звернення: 17.10.2022).

82. Каламбет С. В., Іванов С. І., Півняк Ю. В. Методологія наукових досліджень: навч. посіб. Дніпропетровськ: Вид-во Маковецький, 2015. 191 с.

83. Капінус О. С. Методологія, теорія і методика формування професійної суб'єктності майбутніх офіцерів Збройних сил України: монографія. Житомир : Вид. О. О. Євенок, 2020. 600 с.

84. Карпова С. Синергетичний підхід у підвищенні якості педагогічних досліджень. *Науковий вісник Миколаївського національного університету імені В. О. Сухомлинського. Педагогічні науки.* 2018. № 1. С. 98–102. URL: http://nbuv.gov.ua/UJRN/Nvmdup_2018_1_20 (дата звернення: 03.12.2021).

85. Квіт С. Основи герменевтики: навч. посіб. / Квіт С. – К.: Вид. дім «КМ Академія», 2003. 192 с.

86. Кін О. М. Система формування національної самосвідомості студентської молоді в процесі громадської діяльності: дис. ... д-ра пед. наук / Харків. нац. пед. ун-т імені Г. С. Сковороди, МОН України. Харків-Старобільськ, 2021. 557 с.

87. Коваль А. С. Герменевтический круг в формировании методической культуры будущего учителя музыкального искусства. *Музичне мистецтво в освітологічному дискурсі*. 2017. № 2. С. 154–158.

88. Коваль Л. В. Професійна підготовка майбутніх учителів початкової школи: технологічна складова: монографія. Донецьк: Юго-Восток, 2009. 375 с.

89. Коломінський Н. Л. Психологія менеджменту в освіті (соціально-психологічний аспект): монографія. Київ : МАУП, 2000. 286 с.

90. Колтунович Т. А. Етичний кодекс психолога: навч.-метод. посіб. / Чернів. нац. ун-т імені Ю. Федьковича. Чернівці: Рута, 2007. 232 с.

91. Кондратенко Н. Організація семантичного поля тексту: текстовий та інтерпретаційний зміст. Δόξα / Докса: зб. наук. пр. з філософії та філології / Одеський нац. ун-т імені І. І. Мечникова. Одеса, 2004. Вип. 6. С. 40–49.

92. Коновальчук I. I. Методологічні підходи до аналізу інноваційної діяльності суб'єктів нововведень. *Проблеми освіти*: наук-метод. зб. / Ін-т інновац. технологій і змісту освіти МОН України. Київ, 2015. Спец. вип. № 85. С. 63–69.

93. Корж Г. В. Герменевтичний підхід у освіті та соціальному навчанні. *Під знаком Григорія Сковороди: зоряний час української культури*: матеріали IV Міжнар. наук.-практ. конф. «Гуманістична філософія освіти як складова успішних посттоталітарних трансформацій»,

Харків, 6–7 груд. 2018 р. / Харків. нац. пед. ун-т ім. Г. С. Сковороди [та ін.]. Харків: ХНПУ, 2019. С. 61–64.

94. Короткий психологічний словник / за ред. В. І. Войтка. Київ: Вища шк., 1976. 191 с.

95. Костікова І. І. Сучасні методологічні підходи професійної підготовки вчителя засобами інформаційно-комунікаційних технологій. Педагогіка, психологія та медико-біологічні проблеми фізичного виховання і спорту. 2008. № 8. С. 79–83.

96. Кошарний С. Біля джерел філософської герменевтики (В. Дільтей і Е. Гуссерль). Київ, 1992. 124 с.

97. Кребер А., Клакхон К. Культура: критический анализ концепций и дефиниций. Москва, 1992. 301 с.

98. Кремень В. Г Інформаційно-комунікаційні технології в освіті і формування інформаційного суспільства. *Інформатика та інформаційні технології в навчальних закладах.* 2006. № 6. С. 4–9.

99. Крошка О. І. Сучасна психологічна наука про емоційно-оцінне ставлення до себе і життєво-цінні орієнтації. *Науковий вісник ПДПУ імені К. Д. Ушинського*: зб. наук. пр. Одеса, 2008. № 6–7. С. 48–52.

100. Кустовська О. В. Методологія системного підходу та наукових досліджень: курс лекцій. Тернопіль: Економічна думка, 2005. 124 с.

101. Кучук А. Аксіологічний підхід до дослідження правових явищ. *Підприємництво, господарство і право.* 2016. № 9. С. 116–120. URL: http://nbuv.gov.ua/UJRN/Pgip_2016_9_22 (дата звернення: 17.10.2022).

102. Лазаренко Т. В., Осьмачко С. А. Використання контекстного навчання в процесі вивчення іноземної мови у ЗВО. *Педагогіка формування творчої особистості у вищій і загальноосвітній школах*. 2021. Вип. 75, ч. 2. С. 101–106.

103. Леонтьев В. П. Деятельность. Сознание. Личность. Москва: Политиздат, 1975. 304 с.

104. Лимар Л. В. Зміст і складові професійної компетентності сімейного лікаря: психологічний аспект. Вісник післядипломної освіти. Серія: Соціальні та поведінкові науки. 2019. Вип. 8. С. 67–83. URL: http://nbuv.gov.ua/UJRN/vispdoso 2019 8 8 (дата звернення: 14.11.2022).

105. Линенко А. Ф. Герменевтичний підхід у педагогіці і його принципи. Науковий вісник Південноукраїнського національного педагогічного університету імені К. Д. Ушинського. 2018. № 6. С. 55–59.

106. Литвин А. Ф. Методологічні підходи до формування технологічної культури майбутніх учителів технологій у професійній підготовці. *Наукові записки [Національного пед. ун-ту імені М. П. Драгоманова]. Серія: Педагогічні науки*: [зб. наук. ст.]. Київ: Вид-во НПУ ім. М. П. Драгоманова, 2018. Вип. СХХХІХ (139). С. 162–172.

107. Лінник Н. В., Занадрук П. І. Синергетика – спільна дія викладача і студента. *Професійно-прикладні дидактики*. 2018. Вип. 5. С. 80–88.

108. Лісова С. В. Проблема забезпечення якості вищої освіти з позицій системного підходу. *Професійна педагогічна освіта: системні дослідження*: монографія / за ред. О. А. Дубасенюк. Житомир: Вид-во ЖДУ ім. І. Франка, 2015. С. 160–172.

109. Лісовець О. Методологічні засади організації процесу формування соціально-правової компетентності майбутніх соціальних працівників. *Педагогічний часопис Волині*. 2018. № 1. С. 140–146. URL: http://nbuv.gov.ua/UJRN/pchv_2018_1_24 (дата звернення: 13.11.2021).

110. Літературознавчий словник-довідник. 2-ге вид., виправл., допов. Київ: Академія, 2007. 751 с. (Nota bene).

111. Лозова В. І., Троцко Г. В. Теоретичні основи виховання і навчання: навч. посіб. / Харк. держ. пед. ун-т імені Г. С. Сковороди. 2-е вид., випр. і доп. Харків: ОВС, 2002. 400 с.

112. Ломов Б. Ф. Системность в психологии. Воронеж: НПО МОДЭК, 2003. 586 с.

113. Лопушанська Ю. М. Контекстний підхід у навчанні студентівсоціологів професійній англійській мові. *Наукові праці [Чорноморського державного університету імені Петра Могили комплексу "Києво-Могилянська академія"]. Сер.: Педагогіка.* 2012. Т. 188, Вип. 176. С. 98– 101. URL: http://nbuv.gov.ua/UJRN/Npchduped_2012_188_176_24 (дата звернення: 17.10.2022).

114. Лосєва Н. Герменевтичний підхід до навчання як умова самореалізації суб'єктів навчального процесу. URL: file:///C:/Users/Admin/Downloads/loseva%20(1).pdf (дата звернення: 19.10.2021).

115. Луговий В. І. Європейська концепція компетентнісного підходу у вищій школі та проблеми її реалізації в Україні. *Педагогіка і психологія*.
2009. № 2. С. 13–26.

116. Лутай В. С. Синергетична парадигма як філософськометодологічна основа формування світоглядів XXI ст. *Філософія освіти XXI століття. Проблеми та перспективи. Методологічний семінар*: зб. наук пр. / за ред. В. Л. Андрущенка. Київ: Знання, 2000. Вип. З. С. 99–103.

117. Максименко С. Д., Соловієнко В. О. Загальна психологія: навч. посібник. Київ: МАУП, 2000. 256 с.

118. Мамиченко С. А. Системний і компетентнісний підходи – методологічна основа формування культури конкурентних відносин у майбутніх фахівців із бізнес-адміністрування. *Педагогіка формування творчої особистості у вищій і загальноосвітній школах*: зб. наук. пр. 2020. № 71, т. 2. С. 156–161.

119. Мануйлов Ю. С. Средовой подход в воспитании. Педагогика.
2000. № 7. С. 36–41.

120. Мартинчук О. В. Методологічні підходи до фахової підготовки вчителів-дефектологів для роботи в умовах інклюзивного навчання. *Зб.* наук. праць Кам'янець-Подільського нац. ун-ту імені Івана Огієнка. Серія: Соціально-педагогічна. 2013. Вип. 23, ч. 1. С. 114–124.

121. Мартинюк Т. С. Методика реалізації діяльнісного підходу у процесі навчання географії України учнів 8–9 класів: дис. … канд. пед. наук: 13.00.02. Київ, 2016. 222 с.

122. Марущак О. Структура системного підходу до професійної підготовки майбутніх вчителів трудового навчання. *Сучасні інформаційні мехнології та інноваційні методики навчання у підготовці фахівців: методологія, теорія, досвід, проблеми*: зб. наук. пр. Вінниця : ТОВ «Друк плюс», 2007. Вип. 15. С. 337–342. URL: https://vspu.net/sit/index.php/sit /article/view/4852/4264 (дата звернення: 13.11.2021).

123. Масич С. Ю. Методологічні підходи як підґрунтя становлення системи підготовки викладача вищого навчального закладу. *Педагогіка та психологія*. Харків, 2014. Вип. 46. С. 86–96.

124. Методика навчання іноземних мов і культур : теорія та практика: [підруч. для студ. класич., пед. і лінгвіст. ун-тів] / О. Б. Бігич та ін. / за заг. ред. С. Ю. Ніколаєвої. Київ : Ленвіт, 2013. 590 с.

125. Мешко Г., Мешко О. Аксіологічний підхід як методологічний орієнтир у підготовці майбутніх учителів до збереження і зміцнення професійного здоров'я. *Ціннісні орієнтири в сучасному світі: теоретичний аналіз та практичний досвід* : зб. тез IV Міжнар. наук.практ. конф. (13-14 травня 2022 р., м. Тернопіль). Тернопіль: Вектор ; ТНПУ ім. В. Гнатюка, 2022. С. 337–339.

126. Мирончук Н. М. Контекстний підхід у підготовці студентів до професійної діяльності у зарубіжній педагогічній теорії. *Креативна педагогіка*: [наук.-метод. журнал] / Академія міжнародного

співробітництва з креативної педагогіки. Полісся; Житомир, 2018. Вип. 13. С. 95–101.

127. Мілорадова Н. Е., Шевченко В. В. Компетентнісний підхід як методологічна основа дослідження професійної компетентності особистості. *Габітус*. 2020. № 16. С. 233–237.

128. Мойсеюк Н. Е. Педагогіка : навч. посіб. Київ : Саммит-Книга,. 2007. 656 с.

129. Нагорна Н. В. Формування у студентів понять компетентності й компетенції. *Виховання і культура*. 2007. № 1–2 (11–12). С. 266–268. Наукові підходи до педагогічних досліджень : колективна монографія / за заг. ред. д. пед. наук, професора, чл.-кор. НАПН України В. І. Лозової. Харків : Вид-во Віровець А. П. «Апостроф», 2012. 348 с.

130. Нелін Є. Психоаналітична педагогіка як новітня концепція в освіті постнеокласичного суспільства. *Науковий вісник Миколаївського* національного університету імені В. О. Сухомлинського. Педагогічні науки. 2017. № 4 (59). С. 363–367.

131. Нехаєнко С. І. Вимоги сучасних методологічних підходів до організаційно-педагогічних умов розвитку професійної компетентності організаторів. *Інноваційна педагогіка*. 2019. Вип. 17, т. 2., С. 43–50.

132. Овчарук О. Компетентності як ключ до оновлення змісту освіти. Стратегія реформування освіти в Україні: Рекомендації з освітньої політики. Київ : К.І.С., 2003. С. 13–39.

133. Овчарук О. В. Компетентнісний підхід до формування змісту середньої освіти: досвід зарубіжних країн. *Компетентнісний підхід у сучасній освіті: світовий досвід та українські перспективи* / за заг. ред. О. В. Овчарук. Київ : К.І.С., 2004. С. 5–14.

134. Овчинникова М. В. Синергетичний підхід як методологічна основа дослідження системи підготовки майбутніх учителів математики

до науково-дослідницької діяльності. Проблеми сучасної педагогічної освіти. Педагогіка і психологія. 2013. Вип. 39 (2). С. 263–271.

135. Олійник О. В. Культурологічний підхід як наукова основа розвитку теорії та практики педагогічної освіти. Наукові npaui державного університету [Чорноморського імені Петра Могили комплексу "Києво-Могилянська академія"]. Сер.: Педагогіка: наук. журн. / Чорном. держ. ун-т ім. Петра Могили. Миколаїв, 2006. Вип. 3, т. 50. С. 39-43.

136. Онищенко В. Д. Фундаментальні педагогічні теорії: монографія. Львів : Норма, 2014. 356 с.

137. Опачко М. В. Особистісно-діяльнісний підхід у підготовці майбутнього вчителя фізики з дидактичного менеджменту. *Науковий вісник Ужгородського національного університету. Серія: Педагогіка. Соціальна робота* / голов. ред. І. В. Козубовська. Ужгород : Говерла, 2018. Вип. 2 (43). С. 196–200.

138. Оргеєва С. В. Хачатрян В. В., Черниш Л. П. Системний підхід до структури професійної підготовки майбутніх авіафахівців. *Вісник Національного авіаційного університету. Серія: Педагогіка. Психологія*: зб. наук. пр. Київ: НАУ, 2015. Вип. 6. С. 134–139. URL: https://doi.org/10.18372/2411-264x.6.10208 (дата звернення: 13.11.2021).

139. Орду К. С. Формування інформаційно-комунікативної компетентності майбутніх сімейних лікарів у професійній підготовці : дис. ... д-ра філософії: 015 : професійна освіта (спеціалізація – теорія і методика професійної освіти) / Держ. закл. «Південноукраїнський національний педагогічний університет імені К. Д. Ушинського», Одеса, 2021. 318 с.

140. Основи методології та організації наукових досліджень: навч.
посіб. для студ., курсантів, аспірантів і ад'юнктів / за ред.
А. Є. Конверського. Київ : Центр учбової літератури, 2010. 352 с.

141. Паламар С. Компетентнісний підхід як методологічний орієнтир модернізації сучасної освіти. *Освітологічний дискурс*. 2018. № 1–2. С. 267–278. URL: https://doi.org/10.28925/2312-5829.2018.1-2.77621 (дата звернення: 14.10.2021).

142. Паращенко Л. І. Зінченко О. П., Андруховець П. М. Готовність до діяльності: принципи та форми організації управлінської підготовки старшокласників: навч.-метод. посіб. Київ: Майстер книг, 2011. 104 с.

143. Петінова О. Б. Проблема цінності в філософії. *Культура* народов Причерноморья. 2002. № 36. С. 185–188.

144. Петрушенко В. Тлумачний словник основних філософських термінів. Львів : Вид-во Нац. ун-ту "Львівська політехніка", 2009. 264 с.

145. Пєхота О. М., Будак В. Д. Підготовка майбутнього вчителя до впровадження педагогічних технологій. Київ: Вид-во А.С.К., 2003. 240 с.

146. Плахотнюк О. Л. Поняття «концепція виховання»: змістовий аспект. URL: http://ps.stateuniversity.ks.ua/file/issue_57/36.pdf (дата звернення 18.07.2019).

147. Полатайко О. М. Герменевтичний підхід до формування естетичної культури майбутнього вчителя музичного мистецтва. *Актуальні питання мистецької освіти та виховання*: зб. наук. пр. / М-во освіти і науки України, Сумський держ. пед. ун-т імені А. С. Макаренка; редкол.: Г. Ю. Ніколаї, А. Валюха, Н. П. Гуральник [та ін.]. Суми: ВВП «Мрія», 2016. Вип. 1 (7). С. 3–11.

148. Пометун О. І. Дискусія українських педагогів навколо питань запровадження компетентнісного підходу в українській освіті / за заг. ред.О. В. Овчарук. Київ : К.І.С., 2004. 112 с.

149. Пометун О. І. Теорія та практика послідовної реалізації компетентісного підходу в досвіді зарубіжних країн. *Компетентнісний підхід у сучасній освіті: світовий досвід та українські перспективи*:
Бібліотека з освітньої політики / заг. ред. О. В. Овчарук. Київ, 2004. С. 15– 24.

150. Поплавська С. Д. Методологічні підходи формування комунікативної компетентності майбутніх медичних сестер. Вісник Луганського національного університету імені Тараса Шевченка: Педагогічні науки. 2018. № 6 (320). С. 240–248.

151. Прищак М. Д., Мацко Л. А. Психологія : навч. посіб. / Вінниц. нац. техн. ун-т. Вінниця: ВНТУ, 2012. Ч. 1. 2012. 140 с.

152. Про вищу освіту: Закон України від 01.07.2014 р. № 1556-VII: станом на 27 жовт. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/1556-18#Text (дата звернення: 14.11.2022).

153. Про затвердження Державного стандарту базової і повної загальної середньої освіти : Постанова Каб. Міністрів України від 23.11.2011 р. № 1392: станом на 1 верес. 2020 р. URL: <u>https://zakon.rada.gov.ua/laws /show/1392-2011-п#Text</u> (дата звернення: 14.11.2022).

154. Про Національну доктрину розвитку освіти: Указ Президента України від 17.04.2002 р. № 347/2002. URL: <u>https://zakon.rada.gov.ua/laws</u> /show/347/2002#Text (дата звернення: 14.11.2022).

155. Про Національну програму інформатизації: Закон України від 04.02.1998 р. № 74/98-ВР: станом на 1 січ. 2022 р. URL: <u>https://zakon.rada.</u> <u>gov.ua/laws/show/74/98-вр#Text</u> (дата звернення: 18.10.2022).

156. Про Національну стратегію розвитку освіти в Україні на період до 2021 року: Указ Президента України від 25.06.2013 р. № 344/2013. URL: https://zakon.rada.gov.ua/laws/show/344/2013#Text (дата звернення: 10.12.2021).

157. Про освіту: Закон України від 05.09.2017 р. № 2145-VIII: станом на 27 жовт. 2022 р. URL: <u>https://zakon.rada.gov.ua/laws/show/2145-19#Text</u> (дата звернення: 14.11.2021).

158. Про професійну (професійно-технічну) освіту: Закон України від 10.02.1998 р. № 103/98-ВР: станом на 1 лип. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/103/98-вр#Техt (дата звернення: 14.11.2022).

159. Про схвалення Стратегії розвитку медичної освіти в Україні: Розпорядж. Каб. Міністрів України від 27.02.2019 р. № 95-р. URL: https://zakon.rada.gov.ua/laws/show/95-2019-р#Text (дата звернення: 18.11.2022).

160. Просяник О. П. Лінгвістична концепція і лінгвістична теорія у дискурсивному вимірі. *Studia linguistica*. 2019. Вип. 15. С. 222–234. URL: http://nbuv.gov.ua/UJRN/Stling_2019_15_18 (дата звернення 18.07.2019).

161. Професійна педагогічна освіта: особистісно орієнтований підхід: монографія / за ред. О. А. Дубасенюк. Житомир: Вид-во ЖДУ ім. І. Франка, 2012. 436 с. URL: http://eprints.zu.edu.ua/13273/1 /mono_osob_orient _osvita.pdf (дата звернення: 19.10.2021).

162. Професійна педагогічна освіта: системні дослідження: монографія / за ред. О. А. Дубасенюк. Житомир : Вид-во ЖДУ ім. І. Франка, 2015. 308 с.

163. Рибалка В. В. Методологічні питання наукової психології. Київ: Ніка-Центр, 2003. 204 с.

164. Рижко В. А. Концепція як форма наукового знання. Київ: Наукова думка, 1995. 204 с.

165. Родигіна І. Компетентнісно спрямований педагогічний процес. *Ocsima.UA*. URL: https://osvita.ua/school/method/1963/ (дата звернення: 18.10.2022).

166. Розман I. Науково-методологічні підходи дослідження педагогічної персоналії. *Міжнародний науковий журнал «Університети і лідерство»*. 2021. № 11. С. 16–24. URL: https://doi.org/10.31874/2520-6702-2021-11-1-16-24 (дата звернення: 17.11.2021).

217

167. Рубинштейн С. Л. Вопросы психологической теории. *Вопросы психологии*. 1955. № 1. С. 6–17.

168. Рубинштейн С. Л. Основы общей психологии. Москва: Госучпедизд, 1946. 704 с.

169. Рубинштейн С. Л. Проблемы общей психологии. Москва: Педагогика, 1976. 416 с.

170. Русалкіна Л. Г. Формування умінь англомовного ділового спілкування у майбутніх лікарів: дис. ... канд. пед. наук : 13.00.02 / Держ. закл. «Південноукраїнський національний педагогічний університет імені К. Д. Ушинського». Одеса, 2014. 303 с.

171. Савченко О. Системний підхід до модернізації змісту загальної середньої освіти. *Рідна школа*. 2010. №1–2. С. 3–7.

172. Сакалюк О. О., Черненко Н. М. Середовищний підхід в управлінні закладом освіти з інклюзивним навчанням. *Науковий вісник Південноукраїнського національного педагогічного університету імені К. Д. Ушинського.* 2020. № 2. С. 7–13. URL: http://nbuv. gov. ua/UJRN /punpu_2020_2_3 (дата звернення: 17.10.2022).

173. Самборська Н. М. Соціально-комунікативна компетентність майбутніх медичних працівників у контексті системного та компетентнісного підходів. *Проблеми освіти*: наук.-метод. зб. / Ін-т інновац. технологій і змісту освіти МОН України. Київ, 2015. № 85. С. 97–101.

174. Сидоренко В. К., Дмитренко П. В. Основи наукових досліджень : навч. посіб. для вищ. пед. закл. освіти. Київ: РННЦ «ДІНІТ», 2000. 260 с.

175. Сидорук І. І. Середовищний підхід у формуванні соціальної компетентності майбутніх соціальних працівників. *Актуальні питання гуманітарних наук.* 2020. Вип. 27, т. 4. С. 218–223.

176. Сисоєва С. О. Особистісно орієнтовані технології: сутність, специфіка, вимоги до проектування. *Професійна освіта: педагогіка і психологія.* 2003. Ч. 4. 567 с.

177. Сисоєва С. О., Бондарева Л. І. Педагогічні технології професійної освіти. Навчальний тренінг: навч.-метод. посіб. Київ: ВМУРоЛ «Україна», 2006. 262 с.

178. Сисоєва С. О., Кристопчук Т. Є. Методологія науковопедагогічних досліджень: підручник. Рівне: Волинські обереги, 2013. 360 с.

179. Система управління якістю медичної освіти в Україні / [І. Є. Булах, О. П. Волосовець, Ю. В. Вороненко та ін.]. Донецьк: АРТ-ПРЕС, 2003. 212 с.

180. Системний підхід у вищій школі: навч. посіб. / автори-упоряд.Т. Д. Кочубей, К. В. Іващенко. Умань: ПП Жовтий О. О., 2014. 131 с.

181. Слесик К. М. Теоретико-методичні основи формування етичної культури учнів основної школи у процесі навчання гуманітарних предметів: монографія. Харків, 2014. 368 с.

182. Словник – тлумачний словник української мови, орфографічний словник онлайн. URL: https://slovnyk.ua/ (дата звернення: 07.07.2021).

183. Словник-довідник з професійної педагогіки / за ред.А. В. Семенової. Одеса : Пальміра, 2006. 221 с.

184. Собченко Т. М. Дидактична система змішаного навчання студентів філологічних спеціальностей у закладах вищої освіти: дис. ... д-ра пед. наук: 13.00.09, 13. Харків; Полтава: [б. в.], 2021. 575 с.

185. Соціологія: [підруч.] / [за ред. В. Г. Городяненко]. Київ: Академія, 2008. 544 с.

186. Спеціальні історичні дисципліни: довідник: навч. посіб. для студ. вищ. навч. закл. / І. Н. Войцехівська (кер. авт. кол.), В. В. Томазов,

М. Ф. Дмитрієнко [та ін.] / НАН України. Інститут історії України. Київ: Либідь, 2008. С. 156–163.

187. Степанов О. М., Фіцула М. М. Основи психології і педагогіки: навч. посіб. 2-ге вид., випр., доп. Київ: Академвидав, 2006. 520 с.

188. Сухомлинська О. Сучасні цінності у вихованні: проблеми, перспективи. Шлях освіти. 1996. № 1. С. 24–27.

189. Сучасний студент у контексті особистісно-діяльнісного підходу: за результатами науково-методичних досліджень: колективна монографія / О. Б. Бігич та ін. ; [за заг. і наук. ред. О. Б. Бігич]. Київ: Вид. центр КНЛУ, 2014. 148 с.

190. Сучасний тлумачний словник української мови. Харків, 2006. 832 с.

191. Тихонова Т. В. Особистісно-діяльнісний підхід у професійній підготовці майбутнього вчителя інформатики. *Наукові праці Чорноморський державний університет імені Петра Могили. Серія* : *Педагогіка*. 2000. Т. 7. С. 92–98.

192. Ткаченко Л. І. Праксеологія творчості у розвитку особистості: синергетичний підхід. *Теорія і практика управління соціальними системами: філософія, психологія, педагогіка, соціологія.* 2014. № 3. С. 63–68.

193. Ткачова Н. О. Аксіологічні засади педагогічного процесу в сучасних загальноосвітніх навчальних закладах: дис. ... д-ра пед. наук: 13.00.01. Луганськ, 2006. С. 80–82.

194. Трифонова О. С. Особистісно-діяльнісний підхід до формування мовленнєвої особистості дітей старшого дошкільного віку. *Наука і освіта*: наук.-практ. журнал. 2012. № 3. С. 118–121.

195. Тугаринов В. П. Избранные философские труды. Ленинград: Изд-во ЛГУ, 1988. 344 с.

220

196. Туриніна О. Л. Особистісно-діяльнісний підхід як методологічний принцип дослідження особистісно-професійного розвитку майбутніх психологів. *Наукові праці Міжрегіональної Академії управління персоналом. Психологія.* 2022. Вип. 1 (17). С. 204–209.

197. Украинский советский энциклопедический словарь / [ред. А. Н. Кудрицкий]. Киев : УСЭ, 1988. Т. 2. 768 с.

198. Українська та зарубіжна культура : [навч. посіб.] / під заг. ред. К. В. Заблоцької. Донецьк : Схід. видав. дім, 2001. 372 с.

199. Философский словарь / [сост. И. В. Андрущенко, О. А. Вусатюк, С. В. Линецкий, А. В. Шуба]. Киев : А.С.К., 2006. 1056 с.

200. Філіпенко А. С. Основи наукових досліджень. Конспект лекцій: посібник. Київ : Академвидав, 2004. 208 с.

201. Філоненко М. Дослідження взаємозв'язку ефективності професійної підготовки майбутнього лікаря та формованості його особистісних структур. *Технології розвитку інтелекту*. 2015. Вип. 8, т. 1. URL: http://nbuv.gov.ua/UJRN/tri_2015_1_8_12 (дата звернення: 18.10.2022).

202. Філософія : підруч. / за заг. ред. М. І. Горлача, В. Г. Кременя, В. К. Рибалка. Харків : Консул, 2000. 672 с.

203. Філософський енциклопедичний словник / [за ред.В. Шинкарука]. Київ : Абрис, 2002. 744 с.

204. Фунтікова Н. В. Аксіологічний підхід у дослідженні проблеми виховання інтелігентності у студентської молоді. *Духовність особистості: методологія, теорія і практика*. 2012. Вип. 4 (51). С. 157–166.

205. Хакен Г. Синергетика. Москва : Мир, 1980. 388 с.

206. Харківська А. А. Методологічні підходи до формування гармонійних міжособистісних відносин майбутніх учителів. *Проблеми інженерно-педагогічної освіти.* 2020. № 69. С. 15–22.

221

207. Химинець В. Компетентнісний підхід до професійного розвитку вчителя. Закарпатський інститут післядипломної педагогічної освіти. URL: https://zakinppo.org.ua/2010-01-18-13-44-15/233-2010-08-25-07-10-49 (дата звернення: 14.02.2022).

208. Ходань О. Л. Компетентнісний підхід до підготовки майбутніх фахівців у ВНЗ. *Науковий вісник Ужгородського університету: Серія: Педагогіка. Соціальна робота* / гол. ред. І. В. Козубовська. Ужгород: Говерла, 2013. Вип. 29. С. 232–235.

209. Хохліна О. П. Системний, діяльнісний та особистісний підходи як методологічний інструментарій діяльності дефектолога. *Зб. наук. праць Кам'янець-Подільського нац. ун-ту імені Івана Огієнка. Серія соціально- педагогічна*. Кам»янець-Подільський, 2009. Вип. 11. С. 162–168.

210. Хуторской А. В. Ключевые компетенции как компонент личностно ориентированной парадигмы образования. *Народное образование*. 2003. № 2. С. 58–64.

211. Цюняк О. П. Синергетичний підхід як методологічна основа дослідження системи професійної підготовки майбутніх магістрів початкової освіти до інноваційної діяльності. Інноваційна педагогіка. Одеса, 2020. Вип. 20, т. 3. С. 123–126. URL: http://www.innovpedagogy.od .ua/archives/2020/20/part_3/28.pdf (дата звернення: 10.11.2021).

212. Чайка В. М. Основи дидактики: навч. посіб. Київ: Академвидав, 2011. 240 с.

213. Часнікова О. В. Компетентнісний підхід в освіті як основа її реформування. URL: https://www.narodnaosvita.kiev.ua/?page_id=2607 (дата звернення: 18.10.2022).

214. Черепєхіна О. А. Формування професіоналізму майбутніх психологів у ВНЗ: системний підхід. URL: http://www.sworld.com.ua/konfer37/342.pdf (дата звернення: 13.11.2021).

215. Черняк Ю. И. Анализ и синтез систем в экономике. Москва : Экономика, 1970. 506 с.

216. Черняк Ю. И. Системный анализ в управлении экономикой. Москва, 1975. 616 с.

217. Чубрей О. С. Система підготовки майбутніх учителів географії до професійної діяльності на засадах компетентнісного підходу: дис. ... д-ра пед. наук: 13.00.04 / Хмельниц. гуманіт.-пед. акад. Хмельницький, 2020. 511 с.

218. Шабанова Ю. О. Системний підхід у вищій школі: підруч. для студ. магістратури / М-во освіти і науки України; Нац. гірн. ун-т. Дніпропетровськ : НГУ, 2014. 120 с.

219. Шапар В. Сучасний тлумачний психологічний словник. Харків: Прапор, 2005. 64 с.

220. Шапран Ю. П. Формування професійної компетентності майбутніх учителів біології: монографія. Переяслав-Хмельницький: Видво «К.С.В», 2013. 334 с.

221. Шпильова Л. Драмогерменевтика як інноваційна технологія у професійній підготовці майбутнього вчителя музичного мистецтва. *Молодий вчений*. 2019. № 11 (75). С. 233–236.

222. Ягупов В. В. Свистун В. І. Компетентнісний підхід до підготовки фахівців у системі вищої освіти. *Наукові записки НаУКМА*. *Педагогічні, психологічні науки та соціальна робота*. 2007. Т. 71. С. 3–8.

223. Якимович О. Н., Ільчишин Я. В. Вплив середовища вищого навчального закладу на професійне виховання майбутніх фахівців. *Сучасні інформаційні технології та інноваційні методики навчання у підготовці фахівців: методологія, теорія, досвід, проблеми.* 2016. Вип. 46. С. 350–354.

224. Ярошинська О. Середовищний підхід в професійній освіті: теоретичні засади та перспективи впровадження. *Проблеми підготовки* *сучасного вчителя*. 2011. № 4(1). С. 104–109. URL: http://nbuv.gov.ua/UJRN/ppsv_2011_4(1)__19 (дата звернення: 17.10.2022).

225. Ястремська С. О. Теорія і методика професійної підготовки майбутніх магістрів сестринської справи у вищих медичних навчальних закладах засобами дистанційного навчання: дис. ... д-ра пед. наук: 13.00.04 / Хмельницька гуманіт.-пед. акад. Хмельницький, 2018. 358 с.

226. Baker E., Hope L., Karandjeff K.. Contextualized teaching and learning: a faculty primer: A review of literature and faculty practices with implications for California community college practitioners. 2009. URL: https://www.careerladdersproject.org/docs/CTL.pdf (дата звернення: 17.10.2022).

227. Berns R. G., Erickson P. M. Contextual teaching and learning: preparing students for the new economy. *The highlight zone: research and work*. 2001. № 5. Р. 1–8. URL: https://files.eric.ed.gov/fulltext/ED452376.pdf (дата звернення: 17.10.2022).

228. Dictionary of education / [ed. C. V. Good]. 2., imp. N.Y.; Ind.: McGraw-Hill book company, 1945. 495 p.

229. Hudson C. C., Whisler V. R. Contextual teaching and learning for practitioners. *Journal on systemics, cybernetics and informatics*. 2008. Vol. 6, № 4. P. 54–58. URL: www.iiisci.org/journal/cv\$/sci/pdfs/e668ps.pdf (дата звернення: 17.11.2022).

230. Hutmacher Walo. Key competencies for Europe : report of the symposium. Berne, Switzezland, 27–30 March, 1996. Council for Cultural Cooperation (CDCC). A secondary education for Europe. Strasburg, 1997. URL: https://eric.ed.gov/?id=ED407717 (дата звернення: 14.10.2021).

231. Krywa M. Methodological approaches to formation the pupil's creative personality in the research activity. *Prace Naukowe Akademii im. Jana Długosza w Częstochowie. Rocznik Polsko-Ukraiński*. 2015. Т. 17. С. 347–356. URL: https://doi.org/10.16926/rpu.2015.17.25 (дата звернення: 14.11.2022).

232. Meshko H., Meshko O. Scientific-methodological foundations of future teachers' health culture forming. *Theory and practice of future teacher's training for work in new ukrainian school* : monograph / ed. I. F. Prokopenko, I. M. Trubavina. Prague: OKTAN PRINT s.r.o., 2020. P. 112–125.

CHAPTER 3

INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS IN THE EDUCATIONAL ENVIRONMENT OF THE UNIVERSITY AS A PEDAGOGICAL PROBLEM

3.1 Specific traits of international students training in a national higher school

In recent decades, one of the main trends in the development of national higher education systems has been its internationalization. By definition of J. Knight, this process reflects "the integration of an international, intercultural or global dimension into the purpose, function or provision of post-secondary education" [139, p. 2] and is implemented "at the national, sectoral and institutional levels" [as well]. Therefore, internationalization can take place at different levels and, in particular, at the level of individual higher education institutions seeking to take a worthy place among universities as within the country, and the whole global world.

As today the higher education market is becoming international, one of the important directions of internationalization of higher education in different countries is training foreigners in national higher education institutions. In turn, this requires management and other employees of educational institutions to make active efforts to ensure their competitiveness in the modern global world, taking a high place in international rankings [84; 207].

As explained in the scientific literature, to reflect the degree of authority and attractiveness of the university for students, special organizations calculate its rating, and its value is largely influenced by the indicator of international activity of the higher education institution, which is calculated by global rating systems. For example, indicators for determining the international activity of the

university are taken into account by the rating agency The Times Higher Education. One of such indicators is the ratio of the number of foreigners to the total number of local students (the weight of the indicator is 3%). In the QS World University Rankings system, the main indicators also include the relative number (share) of foreign students (weight of the indicator 5%) [2; 37]. The choice of students of the country of study and a particular higher education institution is largely influenced by the general data on its rating, because the high rating of the university is a kind of guarantee that the applicant receives high quality higher education and significantly affects the possibility of employment of a graduate in the specialty after returning to his homeland.

We would like to note that recently higher education has become an important factor in the socio-economic development of many developed countries. This made it possible to perceive services in the educational sphere not only as a social and personal value, but also as a service (commodity), which, according to the classification of the World Trade Organization, is recognized as a source of non-commodity exports. The provision of educational services to foreign students is a much more complex and difficult process compared to the provision of educational services to domestic students. In the light of this, use of the definition of "export of educational services" in the domestic scientific space does not contradict world practice at all, but rather imitates it [132, p.15].

According to D. Plynokos, the export of educational services to foreign students is carried out according to the following stages:

1. *initiating* (conducting advertising and information campaigns, interviews);

2. *initial* (obtaining a visa, meeting a student, registration at the place of study);

3. *main* (direct training of the student in a higher education institution, that is, the export of educational services);

4. *final* (completion of export of educational services, departure from the country) [132, p. 15].

Analyzing the above stages, it should be noted that in fact it is at the main stage that the export of educational services to foreign students is carried out. This stage is the longest and most important, but it is closely related to the previous and subsequent stages. Moreover, the more complex the structure of exporting educational services is, the more different actors are involved in it. According to D. Plynokos, in Ukraine the main subjects of this process are:

- higher education institutions;
- intermediary firms;
- Ministry of Education and Science of Ukraine;
- consular offices;
- Security Service of Ukraine;
- State Border Guard Service.

Noting the significant role of higher education in the social, economic, cultural development of society, it is important to recall that in all countries the situation with the admission of foreign students to higher education institutions has changed dramatically since 2020. The existing global crisis was caused by a global epidemic caused by the rapid spread of the COVID-19 virus worldwide.

In this regard, scientists have identified global and local factors that have negatively affected the recruitment of foreign students in higher education institutions for the 2019-2020 (partially), 2020-2021, 2021-2022 academic years, namely:

- restrictions on the provision of visas for foreign students to study;

unfavorable psycho-emotional state and negative mood of students,
which reduces the attractiveness of studying abroad;

 a significant decrease in the financing of individuals, which caused a limitation of the ability to spend funds;

increasing the cost of air tickets due to social distancing in air passenger transport;

increase in proposals of international universities for the provision of distance education services (virtual);

- deterioration of the epidemiological situation in the countries;

lack of a single effective mechanism for remote entry of foreign citizens [135, p. 9-10].

In the current epidemic situation, higher education institutions were initially forced to make a number of decisions (postponement, prolongation, postponement of academic admission periods, and later – a ban on the admission of students from the PRC) aimed at preventing the spread of coronavirus [172, p.11]. Subsequently, the "chaos" reached most countries and well-known international organizations, in particular the European Student Union and the Erasmus Student Network, because the situation that arose was not subject to prompt resolution.

In particular, as evidenced by the survey data of 11000 people of one of the British consulting companies "The impact of coronavirus on global higher education", 46% of respondents have lost the desire to study abroad due to the spread of the COVID-19 pandemic, 58% - are interested in obtaining higher education in a distance format, 42% - do not want to study online at all [236].

It is quite obvious that all higher education institutions are still experiencing a temporary crisis regarding the recruitment of foreign students for study, but even in such a situation, domestic universities must be competitive, attractive, mobile, flexible, able to quickly adapt to changes in the educational environment in order to preserve scientific and educational potential.

Thus, current trends in the further development of domestic higher education are aimed at the implementation of intensive collaboration and the development of contacts between higher education institutions around the

world. The export of educational services and integration into the world educational space are in demand.

For higher education in Ukraine, the expansion and popularization of the provision of educational services are quite profitable. First of all, this has a significantly positive effect on the economy, since the training of future specialists from other countries is a separate item of income. Also, the desire to attract foreign students encourages higher education institutions to form a system of training specialists in accordance with the requirements of the world labor market for the quality of education and areas of training [54; 191].

Recall that in connection with the new challenges faced by the domestic higher school at the beginning of the XXI century. in the process of its integration into the European and world educational space and through the deepening of the process of internationalization of education, in Ukraine in 2002 was established the state enterprise "Ukrainian State Center for International Education "Study in Ukraine"), which belongs to the sphere of management of the Ministry of Education and Science of Ukraine and is the official source of information on the education of foreign students in Ukraine [70]. The main mission of "Study in Ukraine" is to increase Ukraine's competitiveness in the international market of educational services, and the main task is to promote the popularization of Ukrainian education at the border [ibid.].

According to statistics, the number of foreign students in domestic higher education institutions has significantly increased in Ukraine over the past decades, which greatly contributes to increasing their competitiveness in the world market of educational services. In this context, on April 21, 2021, under No. 350-p, the Cabinet of Ministers of Ukraine issued an order "On approval of the action plan to promote opportunities for higher education in Ukraine for foreign students until 2025" [142] in accordance with the Decree of the President of Ukraine "On improving higher education in Ukraine" (June 2, 2020 No. 210/2020) [140].

According to the information provided by the Ukrainian State Center for International Education in 2020, more than 76 thousand foreign students from 155 countries studied at 394 domestic universities [70].

It is also advisable to note from which countries the majority of foreign students come to Ukraine. In this regard, of considerable interest are the data provided by the Country State Center for International Education ("Study in Ukraine") on the top 10 countries by origin of foreign students for 2020.

As it turned out, among domestic higher education institutions, the most popular for foreigners are universities that train future doctors. In particular, these are the following: V. N. Karazin Kharkiv National University, Kharkiv National Medical University, Bogomolets National Medical University, Odessa National Medical University, Zaporizhia State Medical University, M. I. Pirogov Vinnitsa National Medical University, Dnipro State Medical University, etc. [70].

It is obvious that in Ukraine, as in other countries, since 2020, due to the spread of the COVID-19 pandemic, the situation with the admission of foreign students to higher education institutions has deteriorated sharply. in the domestic high school. It should be noted that in this regard, Ukraine has already accumulated some valuable experience.

In general, it can be summed up that Ukraine occupies a prominent place in the world among other countries where a large number of foreign students study in higher education institutions. Obtaining higher education in Ukraine is a prestigious and sought-after business for foreign students, because they receive high-quality fundamental education and prestigious specialties. In light of this, an important task for domestic higher education institutions was to ensure the training of highly qualified foreign specialists and ensure that they receive high-level education.

It should be noted that foreign students who consciously and voluntarily choose higher education institutions clearly understand the purpose of their stay in Ukraine, and this, in turn, significantly distinguishes them from migrants and refugees, who often accidentally find themselves in the country. After all, the temporary stay of foreign students in another country for the period of study is associated with their higher education and mastering the chosen profession.

We emphasize that the choice of the applicant of the country for study and a particular institution of higher education in it is influenced by a number of different factors. So, according to L. Mazitova, the main ones are as follows:

- the cost of education;

- language of instruction;
- comfort of the lingual sociocultural learning environment;
- learning foreign languages;

- the opportunity to find after graduation and return to home a job in the specialty received in it [102, p. 132].

In this regard, foreign applicants, when choosing Ukrainian universities, take into account the fact that, compared to Western European higher education institutions, Ukraine has much lower tuition fees and there are no strict exams in Ukrainian or English. At the same time, the quality of professional training is quite high.

Another source of information notes that the choice of Ukraine by foreigners as a country for higher education is largely due to the following factors:

international recognition of scientific achievements of domestic higher education institutions;

- use of effective teaching methods;
- high quality of education;
- prestige and financial profitability;

232

- the presence of equal rights, freedoms, obligations with citizens of Ukraine while living in this country [70].

It should be noted that when choosing a higher education institution for study, foreigners carefully study the positive and negative aspects of domestic higher education. In particular, A. Koroshchenko and A. Joshua in the process of interviewing this category of respondents revealed the following attractive advantages for them of the Ukrainian higher education system:

- the lowest tuition fees in Europe against the background of high quality higher education;

after successful completion of the bachelor's degree (the second level of higher education), it is possible to complete the training in the magistracy (the third level of higher education) of one of the European universities;

- high qualification and professional competence of the teaching staff;

- respectful and tolerant attitude of all participants in the educational process and the absence of discrimination against foreign students, etc. [89].

 According to the authors, among the main typical shortcomings of Ukrainian higher education, foreign students note such as:

- outdated material and technical base;
- insufficient amount of English-language educational literature;
- insufficient level of foreign language proficiency of teachers;
- problems of organization of life and leisure;
- lack of international clubs in Ukraine;

- the existence of gaps in the involvement of foreign students in scientific research due to the gap between educational institutions and industry of different countries, etc. [89].

We'd like to note that a necessary prerequisite for admission of an applicant to the university is that he has an appropriate level of education, which is confirmed by the documents provided. Foreign citizens can freely choose a

higher education institution licensed to provide educational services to foreigners and enter it, and such an applicant is enrolled based on the results of the interview.

If the applicants are not fluent in the language of instruction (Ukrainian, English, etc.), their preparation for admission to the faculty in the chosen direction of education and specialty at the preparatory departments (faculties) according to special curricula is first organized [213, p. 22]. As a rule, in the structure of each domestic higher education institution that still works with foreigners, there is a unit (preparatory department or faculty) that carries out their language and primary professional training for admission to higher education institutions within ten months.

Let us clarify that the preparatory departments in Ukrainian higher education institutions operate in accordance with the Law of Ukraine "On the Legal Status of Foreigners and Stateless Persons" No3929-XII of 04.02.1994 [148], order of the Ministry of Education and Science of Ukraine No1541 "Some issues of organization of recruitment and training (internship) of foreigners and stateless persons" dated 01.11.2013. [50], Order of the Ministry of Education and Science of Ukraine No. 1272 "On Amendments to the Order of the Ministry of Education and Science of Ukraine dated 01.11.2013 No. 1541" of 11.12.2015, Resolution of the Cabinet of Ministers of Ukraine No. 136 "On Training of Foreign Citizens in Ukraine" of 26.02.1993 [144], Resolution of the Cabinet of Ministers of Ukraine No. 684 "Some issues of recruitment for training foreign and stateless persons" of September 11, 2013, etc.

It should be emphasized the importance of language training of foreign students at the preparatory department (faculty), as this ensures their communicative needs in various fields of communication – from everyday to scientific. In this regard, the opinion of V. Golovko that the majority of study time during the training of foreigners at the preparatory stage of education is devoted precisely to ensuring their study of the language of instruction [37, p.

93]. As determined, during the organization of the educational process in a higher education institution should be taken into account: the choice of the language of instruction by foreigners (this aspect is reflected in the terms of the contract), their communicative needs and training profile, as well as the capabilities (material and technical, teaching staff etc.) of the educational institution itself.

Studying foreigners at preparatory courses (department, faculty) allows them to really increase their language competence. Upon successful completion of training, applicants receive a certificate and enter a higher education institution. In particular, at the preparatory department (faculty) foreign students can achieve proficiency in this language at the level of A1, A2, B1. Education in the specified department can be considered the initial stage of training future foreign specialists [192, p.137].

At the same time, it is important to emphasize that preparatory centers (faculties) play an important role in ensuring not only the language awareness of future foreign specialists, but also their adaptation to the fundamentally new socio-cultural environment to which they fall after moving to Ukraine. In light of this, V. Golovko notes that the preparatory center creates appropriate living conditions in a new sociocultural environment for them, and such a specially organized approach to the education of foreign students (faculty) contributes to their successful adaptation [ibid.]. Similar ideas are expressed by A. Surigin, who, noting the significant importance of the preparatory stage in the educational process, states that this stage involves the training of foreign students, which are focused on a specific professional industry, a language that is not native to them, which will later be trained in "conditions of intensive socio-biological adaptation" [184].

Let us clarify that under the term "adaptation" (from the Latin. adapto – adaptation) scientists in particular understand: "adaptation of an organism, personality or group to new external conditions" [3; 138], "a certain stage of

socialization, that is, the assimilation by the individual of social norms and values" [17; 131], "a complex, multi-level and dynamic process that changes in students from course to course, has a certain sequence and features of the flow" [59, p. 7].

Since the problem of adaptation for immigrants from other countries is quite acute, various aspects of the implementation of this process, ways to solve issues related to this problem are in the center of attention of many domestic and foreign scientists [3; 4; 15; 22; 23; 103; 138; 163; 164; 179; 193; 203; 214; 216; 221; 222; 224]. Moreover, I. Skrypnyk, S. Sorokina, S. Shevchenko, T. Shevchenko emphasize that the hasty adaptation of foreign students contributes to their rapid inclusion in the learning process, improves the quality of this process and the level of educational achievements of future specialists, provides high motivation for mastering their knowledge [164, p. 192]. Analyzing the effectiveness of the adaptation of foreign students to the educational environment of Ukraine, O. Segeda and A. Osypenko also note that the professionally oriented education of foreign students is based on the peculiarities of the future profession, and also combines "mastering a professionally oriented language, developing the personal qualities of the student-subject of study, knowledge of the culture of the country of study and the acquisition of special skills based on professional and linguistic knowledge" [156].

According to the conclusions of scientists, in order to ensure the effectiveness of the process of obtaining higher education by foreign students, it is necessary to create favorable prerequisites for the implementation of various types of their adaptation. According to the conclusions of various researchers, we are talking primarily about the following types of adaptation:

social, ethnic, intercultural, didactic, individual psychological,
economic, domestic (D. Gunpowder [138]);

linguistic, conceptual, ethical and informational, climatic, everyday
(V. Golovko [37, p. 87]);

linguistic, cultural, psychological (V. Markovsky, D. Marakushin, etc.) [108, pp. 130-132];

sociocultural, multicultural, communicative, psychological
(A. Zhurtova, M. Unezheva, O. Sherieva [59, p.7]);

social, cultural, linguistic, informational, psychophysiological(I. Kotovska [91, p. 133]), etc.

Noting the importance of all the above-mentioned types of adaptation, we consider it necessary to note that it is sociocultural adaptation that acquires special significance for each foreign student. Therefore, the Development Strategy of the State Enterprise "Ukrainian State Center for International Education" for 2021-2025 stipulates that one of its strategic goals is "to promote the sociocultural adaptation of foreign students in Ukraine" [176, p. 25].

We emphasize that foreign students, getting into a fundamentally new language and sociocultural environment, experience a variety of difficulties, problems, barriers, risks, etc. Moreover, the relocation of young people to another country and even a temporary change of place of residence is usually a stressful situation for them. acquaintance with the traditions, customs and culture of the Ukrainian people, norms of behavior, etiquette and mentality of local residents, as well as with another model of education.

Obviously, it is especially difficult for foreign students in the first months of study, being in another country. It was at this time that they should master a sufficiently large amount of new knowledge, get acquainted with new disciplines, intensively study the language for further study. At the same time, young people must adapt to new requirements and conditions of existence in a foreign-speaking environment, which for them, due to the lack of rich life experience, is quite a difficult task.

As emphasized in the scientific literature, in the first months after moving to another country, foreign students face the need to immerse themselves not only in new knowledge, but also in a new culture, which is associated with the process of acculturation, in particular, active involvement in the ethnos and spiritual wealth of the Ukrainian people. In turn, this contributes to the development of tolerance in young people, respect for other cultures, the formation of each of them as a creative person [17, c.155; 175, c.13].

Investigating the problem of scientific and methodological support for the acculturation of foreign students, I. Steimiller emphasizes the need to form intercultural values in them, which will allow future specialists to establish communications with different people, think critically and formulate correct value judgments about both different objects of reality and their own "I" [175; 215; 216]. According to the conclusions of N. Stenina during the active communicative interaction of foreign students with carriers of other cultures, their systems of personal values are enriched with new humanistic values, new ways of activity are formed, their own picture of the world of each participant is improved [175, p.12]. It should also be emphasized that the quality of professional training of foreign students largely depends on the formation of their professional and value attitude to the chosen specialty, as well as the conscious attitude of the subject to the subject of their own educational activities [157, p. 34].

In general, the formed values play an extremely important role in the life of each person, determine his way of being in the world, which convincingly testifies to the complexity of the adaptation period at all its stages and, based on this, the difficulties in organizing the learning process in higher education institutions. Going through a period of adaptation, foreign students comprehend and master new cultural contexts and meanings and, in particular, try to learn the values of a fundamentally new sociocultural environment, which are reflected in accepted norms and requirements for various aspects of human life [39, p. 11]. Taking into account the age, religious and social affiliation of foreign students, their sustainable value priorities will contribute to the quality professional training of future specialists [18].

At the same time, T. Glebova notes that teachers in the process of working with foreigners should definitely take into account the existing differences between the systems of dominant values of their native culture and culture of the country where they study, since these differences can be significant. [35, pp. 319-320].

During the scientific research, the results of O. Bilyk's research were also useful, in which the scientist highlighted important issues and methods of socialization of foreign students in the educational and cultural environment of a higher education institution, revealed the specifics of socialization of foreign students and the role of social and pedagogical support of this process and individual features of foreign students [16; 17]. On this basis, O. Bilyk divides foreign applicants for higher education and several groups, namely:

- English-speaking African students;
- French-speaking African students;
- students from the Middle East and North of America;
- students from Asian countries;
- Hispanic students [16, pp.82-83].

As O. Bilyk clarifies, individual ethnopsychological, national and cultural characteristics of foreign students determine their belonging to a specific ethnic group, nationality and country from which they came to study in Ukraine. In her scientific works, the author characterized the peculiarities of individual groups of foreign students, the specifics of their religion, culture, traditions, etc. [16; 7; 128; 204; 178]. This material was taken into account by us in further research.

Studying the problem of socialization of foreign students in the educational and cultural environment of a higher education institution, O. Bilyk also focused on the importance of their linguistic socialization, since speech

forms thinking, gives orientation in activities and helps the individual to adapt to new requirements [17, p.179]. In light of this, V. Dubchynskyi, O. Trostynska and N. Ushakova note that the language of instruction for foreigners is "not only an academic subject, but also an educational discipline, a means of comprehensive development throughout life and a guide for future specialists in their formation as professional personalities" [192, p.137].

Based on the fact that the language environment plays a crucial role in the sociocultural adaptation of foreign students, at the preparatory department, training is conducted, as a rule, in English or Ukrainian. The main features of training this category of applicants are:

- the use of appropriate teaching methods, which will ensure the transition from one language environment to another;

- actualization of supporting knowledge of students and their application in a foreign language environment;

- organization of independent work taking into account the level of adaptation of foreign students, etc. [153, p. 561].

A prominent place in the language training of foreign students is given to the teaching of professional vocabulary in accordance with the direction of the specialty, the choice of faculty, etc. High-quality mastery by students of the necessary language professional basis at the preparatory department is the key to the successful professional development of future specialists [34; 37; 126; 182; 183].

With this in mind, the language training of foreign students at the preparatory department is aimed at solving such problems as:

development of communicative skills by type of speech activity (speaking, listening, reading, writing);

mastering the language knowledge necessary for professional and communicative communication (knowledge of phonetics, grammatical rules, lexical units, etc.);

 formation of sociocultural knowledge that helps foreign students to know the culture, history, traditions of the language;

- mastering a set of units of professional vocabulary (vocabulary, terms, concepts), etc. [12; 37; 126; 182; 183].

Language training also contributes to the qualitative mastery of knowledge about the features of future professional activity [157, p. 34]. For foreign students to master the necessary language professional basis, scientists advise to pay considerable attention to mastering:

communication-dialogue skills as a communicative-speech interaction;

models and skills of the intragroup subject – subject and intergroup collective interaction;

professional lexicon;

sociocultural and professionally oriented situations, professional and social context;

- skills, techniques and means to create their own creative language product [12; 37; 199].

- Based on the above, the following types of works with professionally oriented texts are important, which are aimed at foreign students mastering the skills of reading literature by profession:

analytical-synthetic and extensive reading (presupposes current control of reading comprehension);

- working with the text, performing communicative exercises, tasks, processing additional material.

We are impressed by R. Hryshkova's opinion that professionally oriented texts should be related to current professional problems, reflect the practical needs of students, direct them to their future professional activities and be socially motivated [44, p. 97]. With this in mind, working with specialized texts contributes to the enrichment of:

- general and professionally oriented terminological vocabulary;

- speech activity of students;

optimal effectiveness of the formation of professionally oriented communicative speech competence of specialists in the relevant field [43, p. 10].

The conclusions of O. Segeda and A. Osypenko about the effectiveness of the adaptation of foreign students to the educational environment of Ukraine are also of interest, in particular, that the professionally oriented education of foreign students is based on the peculiarities of the future profession, and also combines "mastering a professionally oriented language, developing the personal qualities of the student-subject of study, knowledge of the culture of the country of study and the acquisition of special skills, based on professional and linguistic knowledge" [156].

Based on the foregoing, it can be summed up that the importance of the activities of preparatory courses (preparatory stage, pre-university training) is difficult to overestimate, since students, arriving in Ukraine, find themselves in a stressful situation, and within ten months they have the opportunity to adapt to a certain extent due to the systematic organization of training to a certain extent sociocultural. It should be noted that the process of teaching foreign students at the preparatory departments (faculties) has not only positive, but also negative sides.

After completing their studies at the preparatory department (faculty), which is basic for foreign students, they continue their studies at their chosen faculties. However, it is obvious that the process of further education of foreign students should be combined with the process of their adaptation to new living conditions, because otherwise the process of professional training of future specialists will not differ in efficiency.

It should be noted that often some applicants, for example, immigrants from countries that were previously part of the USSR or students who are going to study in English, try to enroll immediately at the selected faculty, that is, without undergoing preparation for such training at the preparatory department. This becomes possible when the applicant speaks either English or Russian, which is close to Ukrainian. However, according to the results of the research conducted by V. Lapteva, students of this category also experience serious problems and difficulties, primarily due to the following reasons:

lack of a specially allocated adaptation period (immediately begin training from the first year);

 significant differences in the organization of the learning process in higher education (other forms and methods of teaching, assessment systems, etc.);

 lack of unified standardization of the content of school education (differences in the level of educational training of school graduates in different CIS countries);

- the content of the curricula is based on taking into account the national, cultural, social, economic characteristics and needs of the nation;

- discrepancy in the level of informatization of education between the CIS countries and Ukraine (the issue of informatization of the educational process in domestic higher education institutions is currently in the spotlight, unlike some countries, where there is only a stage of initial development of this issue) [98].

Revealing the peculiarities of teaching foreign students in a domestic higher school, I. Semenenko notes that the specifics of this process are due to the need of:

taking into account their own experience previously accumulated by foreign applicants (life, educational, etc.);

- facilitating their acquisition of independent work skills;

 implementation of phased acquaintance of future professionals with the content of their professional activities;

 taking into account the individual knowledge of each student in the implementation of interdisciplinary coordination of disciplines of the general education cycle;

implementation of a differentiated approach in the organization of the learning process;

 designing educational material together in cooperation with teachersphilologists to ensure high-quality assimilation of educational information by foreigners, etc. [157, p. 33].

As V. Holovko rightly emphasizes, in order to increase the efficiency of the learning process of foreign students, they should be purposefully involved in the systematic implementation of self-education. Moreover, during both the organization of the educational process and the motivation of future foreign specialists to carry out constant self-improvement, it is necessary to take into account their cultural values as representatives of specific ethnic groups, as well as to respect their religious and personal views. After all, this significantly affects the success of pedagogical interaction, and as a result – on the quality and effectiveness of the educational process [37, p. 89].

It should be noted that due to the forced circumstances associated with the COVID-19 pandemic, higher education institutions in many developed countries have switched to distance learning, as it has become one of the leading forms of education. transferring it to remote and later to a blended learning format using a variety of services, platforms, as well as social networks. [27, p. 43]. At the same time, blended learning as a purposeful interaction of higher education applicants and teachers, which ensures the achievement of the formulated tasks of the educational process and provides for the optimal combination of educational activities of its subjects online and offline, makes it

possible to optimally combine the advantages of traditional and distance education [33; 88; 166; 167].

During the study, the conclusions of scientists regarding the main difficulties and shortcomings manifested in training foreigners were useful. Thus, with the views of T. Kononova and B. Tsyganok, in the process of training future foreign specialists, the following shortcomings are often manifested: low (insufficient) level of basic training of applicants, their mixing different languages in the learning process, lack of modern didactic and methodological materials, excessive condescension of lecturers in working with foreigners, lack of laboratory equipment in higher education institutions and practice bases, isolation of the content diploma design from practical tasks, etc. [85; 205].

O. Bilous also draws attention to the presence of such defects in the process of teaching foreign students: their demonstration of superficial knowledge of the language of instruction, in particular, insufficient vocabulary, which does not allow to actively communicate with other people; poor training in specialized and special disciplines (mathematics, physics, drawings, chemistry, etc.), and as a result – making it impossible for foreigners to use textbooks, manuals, reference books, that domestic students use; the fundamental difference between the forms and methods of education in the Ukrainian university and the relevant elements of education that are used in the higher school of the native country for a foreigner [18].

Therefore, another feature of the education of foreign students is, on the part of the teachers, the ability to qualitatively and effectively organize the learning process in a distance and mixed format, using modern digital services and technologies, and on the part of the students, the formation of information competence, skills of independent educational work, etc. Attention should be paid to this peculiarity of the education of foreign students, since the dynamic development of the modern information and digital society necessitates the

active introduction of computer educational technologies into the learning process at all levels [106; 197; 217; 222; 224; 226; 229; 230; 231].

In the context of the above-mentioned problem, today there is a need to improve the quality of the provision of educational services in institutions of higher education. Therefore, in this connection, A. Kozulina emphasizes the need for teachers to implement innovative activities in the process of ensuring the professional development of future specialists. According to the scientist, teachers who work with foreign students should be able to:

 take into account individual characteristics for the implementation of innovative processes in the process of interaction with foreign students;

- identify oneself with the subject of intercultural interaction;

– reflect;

overcome intercultural barriers;

- use modern scientific terminology, concepts and approaches in the field of innovative activity;

 carry out an analysis of legislative and normative-methodological materials regarding innovative changes in the process of studying foreign students;

justify innovative changes in professional activity during the process of studying foreign students;

interact tolerantly with representatives of other cultures;

- use traditional and modern tools (methods, technologies, ways) of innovative activity in working with foreign students [81].

To increase the effectiveness of the learning process, students and teachers should be equal participants (subjects) of the learning process. When organizing the learning process, the student should act as a "creator of living information, which the teacher must direct competently to obtain the best results" [97]. Use of interactive learning methods at lectures, seminars, and practical classes contribute to:

- diversification of the educational process;

- increasing motivation and activity of students, and as a result - overall success;

- improving the effectiveness of education, etc. [ibid.].

The experience of using interactive teaching methods, in particular the simulation of clinical situations with the help of computer technologies, simulators, in the process of teaching foreign students (for example, when studying medical disciplines), shows a significant improvement in the educational process of training a modern specialist that meets world standards [53; 200].

According to Ya. Lukatska, for better understanding and assimilation of new concepts and terms (for example, when studying the Ukrainian language) by foreign students, visual methods (illustration, demonstration, observation) should be used, lectures should be adapted according to the specialty [101, p.214-215]. The scientist emphasizes the fact that in order to prevent a decrease in the success of foreign students, it is necessary to take into account the difference in the forms and methods of building the educational process, the level of their training, since it is different as in domestic students [ibid.].

The research of O. Kalenyk, T. Tsaregradska, and T. Tarasova regarding the determination of some aspects of the optimization of the learning process of foreign students (for example, when studying natural sciences and languages) was useful, in particular, such as:

optimization of the language learning process, the scientific style of language, natural sciences;

selection, minimization, presentation of goals and tasks taking into account all stages of training;

solving issues of specific selection and submission of educational material;

- use of system diagrams;

- selection of texts and a system of exercises to consolidate a minimum of general scientific vocabulary, etc. [75, p. 195-196].

So, it can be summed up that in general, the organization and implementation of the learning process of foreign students in the domestic higher school has its own specifics, due to the presence of significant sociocultural, psychological, linguistic, religious and other differences between the participants in the educational process due to new conditions of their living.

So, having analyzed the scientific papers of domestic and international scientists in the context of studying the problem of the peculiarities of the learning process of foreign students in higher education institutions and summarizing them, we can conclude that organizing the learning process should take into account the following features:

high-quality organization of language training at preparatory departments (faculties);

- undergoing the period of sociocultural adaptation and creating all the necessary conditions for this;

- implementation of pedagogical support of foreign students by curators, teachers and others;

– high-quality and effective organization of the educational process in distance and mixed format, using modern digital services and technologies (on the part of teachers), formation of information competence, skills of independent educational work, etc. (on the part of students);

- introducing innovative activities by teachers to students;

– use of interactive teaching methods.

3.2. Modern requirements for training medical students

Health has always been perceived as the most important value of a person and society in general, but its absence significantly reduces the ability to personally lead a happy life and to be fully self-actualized. However, it is well known that in recent decades the state of human health has been constantly deteriorating under the influence of unfavorable objective (deterioration of the environmental situation in the world, outbreak of pandemics, the presence of significant social and economic problems in many countries, etc.) and subjective (distress, physical inactivity, unhealthy diet, etc.) factors.

As determined with the results of the conducted research, the health of a modern person mainly depends on the following factors: environmental and social – by 20-22 %; heredity and genetic disorders - by 20-22%, by 8-10%, the level of development of medicine and health care, the quality of medical care - by 8-10%, a person's lifestyle, his attitude to his own health - by about 50% [110; 189]. At the same time, it is worth noting that in recent years the role of medicine has increased significantly.

We clarify that the term "medicine" itself is of Latin origin (the word medicus is translated from Latin as "healing", "healing"). According to the definition of modern scientists, medicine is a branch of science and practical activities aimed at preserving and strengthening people's health, preventing and treating their diseases, as well as encouraging members of society to adhere to a healthy lifestyle, strengthening their own health [110; 111]. Also it is worth noting that the role of medicine has been increasing immensely lately.

Active development of medicine as a science, the aggravation of the problem of preserving and strengthening the health of citizens in different countries will lead to a significant increase in the requirements for the training of medical personnel. Thus, the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) emphasize that "higher

education, research and innovation play a crucial role in supporting social cohesion, economic growth and global competitiveness" [174, p. 5].

We'd like to note that the problem of medical education is methodologically derived from Hippocrates, who emphasized the limitlessness of improving the art of healing. According to this eminent thinker and healer, the person who has chosen the profession of a doctor, is doomed to eternal teaching, for she must always maintain a high level of professionalism [112, p. 49].

The words of Hippocrates remain relevant for today. Indeed, a modern medical worker must first of all perfectly master professional competence, in particular, be familiar with new technologies and medicines, quickly adapt to changes in the legislative nature, and conscientiously fulfill his professional duties, which today are subject to intensive changes [217, p. 220].

As M. Shumylo emphasizes, the increased demand of society for progressive changes in the conditions of global competition of the medical sphere predetermines the consideration of medical institutions of higher education as important drivers of the transformation of medical education [217, p. 200]. The quality of higher education is one of the conditions for the mobility of its subjects, as well as a factor in maintaining competitiveness, attractiveness of higher education institutions, building mutual trust and recognition of qualifications, programs, and other components of higher education, as well as a guarantor of ensuring an adequate level of transparency of educational activities of higher education institutions [56; 174]. At the same time modern consumers of educational services assess the quality of education and trained specialists precisely by the level of formation of their professional competence.

Today, Ukraine is actively integrating into the European and world space, so it is important to analyze the requirements for doctors that are put forward at the international level.

Thus, H. Fields notes that modern doctors have many different responsibilities to perform. Medics treat diseases and injuries, and the types of professional activity of a doctor depend on the type of medicine that he practices. For example, in the United States there are two types of medical degrees for doctors: Doctor of Medicine (MD) and Doctor of Osteopathic Medicine (DO). Thus, the second of them practices a holistic approach to his professional activities, paying special attention to the prevention and study of the patient's musculoskeletal system.

H. Fields states that within the framework of the diagnosis and treatment of the patient, doctors in particular fill out medical histories, prescribe medicines, perform and interpret various diagnostic tests. Specialists in this category advise patients on general health care and work closely with medical staff. Some doctors (surgeons) perform surgical operations. These doctors also study patients' medical histories, order and analyze tests, develop and implement treatment plans, but in addition, they also operate on patients [ibid.].

Most doctors and surgeons choose for themselves a specific area of specialization. For example, some surgeons may specialize in fields such as cardiovascular, reconstructive, neurological or orthopedic surgery. In addition, doctors and surgeons can take other fields, including anesthesiology, family and general practice, general internal medicine, obstetrics and gynecology, or conducting scientific research. for a long time. Their work is carried out in hospitals, doctors' offices, outpatient centers and laboratories. Doctors work both in private organizations and in government agencies [ibid.].

The author mentioned above notes that in the U.S. doctors may work irregularly or long hours. However, according to the results of a survey conducted twice a year by the Doctors Foundation, most doctors work 40 to 60 hours a week, less than one in four doctors less than 40 hours a week. Consequently, doctors spend much more time at work than other average specialists, although this number of hours gradually decreases. At the same
time, it should be noted that the average annual salary of doctors and surgeons in the United States is one of the highest paid professions in the United States [ibid.].

Despite the high physical and mental stress, the long duration of the working day, doctors must conscientiously and efficiently perform all their professional duties, because the health of patients and often even their lives largely depend on it.

The conclusions of scientists (A. P. Singh, S. E. Singh) were useful for our research, that today the doctor should not focus only on the provision of palliative care, controlling the spread of the disease and trying to slow down its course [234; 235]. As A. P. Singh clarified, many doctors today are guided in their work by the following slogan: "sometimes to heal, to comfort. From the point of view of the slightest pain, never to cause harm" [234, p. 19]. But in this case, the doctor often does not eliminate the disease itself and its cause, but only reduces the patient's pain, to a certain extent improves his physical and mental state. and even better – to prevent the occurrence of diseases in members of society through highly qualified preventive work [234; 235].

It should be noted that the profession of a doctor has a high prestige in almost all countries of the world, and in many of them this profession involves a specialist receiving a high salary. Therefore, many applicants choose for themselves this particular profession. However, taking into account the serious consequences for the people around them of the work of a doctor with a low level of professionalism, it should be noted that medical education institutions have a high responsibility for the quality of training of future medical workers who must be ready to devote their entire professional lives to treating patients and carrying out preventive work to preserve the health of patients, as well as constantly improve their level of competence.

It is obvious that the traditional training of future medical specialists, which was focused on the formation of their knowledge, skills and abilities in the

subject field, does not meet modern medical needs. Therefore, for about a decade, an active modernization of domestic medical education was launched.

Today the role of higher medical education is determined by the tasks and requirements of a dynamically changing society. At the same time, the hasty integration of the country into the world scientific and economic space, the prospects for entering the general market of skilled labor, the inevitability of integrating the higher education system into the world educational system necessitated the implementation of significant innovations in this area. and should be aimed today at enhancing individual development in students as future specialists, personalities and citizens, as well as being able to successfully socialize in the labor market. In particular, modern society needs specialists who show independence, creativity, competitiveness and professional mobility, to adapt quickly to changing market needs [1; 41; 69; 74; 96; 99; 119; 181; 185; 194].

As it was found out, in the process of modernization of higher medical education, certain success was achieved. However, at the same time, in the professional training of future doctors, significant shortcomings were identified that negatively affect its quality, in particular the following:

- insufficient level of technical, didactic and methodological equipment of the educational process;

– poor clinical training of future doctors;

- imperfect readiness of teachers of medical universities to carry out pedagogical activities, etc. [1; 41; 69; 74; 96; 162; 181; 185; 194; 196].

In light of this, the provision of a high-quality new level and innovative nature of medical education, taking into account modern requirements and global trends in this area, the transformation of education into an effective tool for the professional development of medical workers becomes a strategic goal for the further development of higher medical education in Ukraine. In its turn, this goal can be realized the following ways:

clear definition of strategic directions for further reform of medical education;

- implementation of the educational process on the basis of a competence-oriented approach;

- ensuring the variability of educational programs using new educational technologies;

– introduction of new models of effective and high-quality training and retraining of specialists on the basis of using the experience of advanced institutes in the formation of a system of external independent certification and accreditation of training of medical specialists, ensuring their mastery of professional competencies;

creation of a system of professional development of medical students
based on the principles of open educational space [36; 112].

In the context of taking into account the new requirements for the training of future doctors, the Order of the Ministry of Education and Science of Ukraine (No. 1197) approved a new Standard of higher education in the field of knowledge 22 Health care specialty 222 Medicine for the second (master's) level of higher education [173]. This standard is based on the following regulatory documents:

- Law of Ukraine "On Higher Education" [141];

- Law of Ukraine "On Education" [147];

National Classifier of Ukraine: Classifier of Professions DK 003:
2010 [118];

– National Qualifications Framework, 2011 [117];

- The list of branches of knowledge and specialties in which the training of applicants for higher education is carried out in 2015 [129];

Resolution of the Cabinet of Ministers of Ukraine of December 28,
2020 No. 1337 "Regulations on the organization of the educational process in

254

health care institutions with the participation of scientific and pedagogical staff of higher education institutions that train applicants for higher education in the field of health care" [143];

Order of the Cabinet of Ministers of Ukraine of February 29, 2019
No. 95-p "Strategy for the Development of Medical Education in Ukraine"
[149];

– Methodical recommendations for the development of higher education standards. Approved by the Order of the Ministry of Education and Science of Ukraine dated 01.06.2017 No 600 (as amended by the order of the Ministry of Education and Science of Ukraine dated 30.04.2020 No 584 [114].

In the standard of higher education of the field of knowledge 22 Health care specialty 222 Medicine for the second (master's) level of higher education, a list of mandatory competencies (integral, general, special (professional, subject) of the graduate is defined [173]. It should be noted that one of the general competencies is that the future physician is able to effectively use information and communication technologies [ibid.].

Let us clarify that today in Ukraine there are 14 state and 5 private institutions of higher medical education [177, p. 5-6]. Organization of the educational process in these institutions is determined by the peculiarities of the contingent of students, as well as the goals, content and conditions of their studies. At the same time, the goal of this process is to meet social and individualized educational needs, focused on the acquisition of competencies necessary to improve the performance of their social roles and their own personal development. The content of medical education is clearly due to the specific field of practical activity of future specialists. It is worth noting that the specific conditions and the implementation of the educational process are characterized by a short budget of time, terms of study and in some cases the combination of complex and responsible professional duties [41; 181; 99; 119; 186; 110; 189; 111].

As it was found out, today many scientists pay considerable attention to the study of issues of improving the efficiency and quality of the training process for future medical workers, improving the work of medical education institutions. In particular, A. Subbetto and L. Grebnev clarify that the system of higher medical education contains the following components: educational, research, social, managerial, economic [112; 41; 181]. According to scientists, educational and research activities play a key role among these components, and their interaction is ensured by the formation of an integrated product, including innovative developments, educational services, etc. [ibid.].

The basis of modern education should be not only academic disciplines, but ways of thinking and activities of students. Therefore, it is important with the adoption of any higher institution not only the release of specialists who receive high-level training, but also the inclusion of students in the learning process, in the development of fundamentally new technologies, their adaptation to the real conditions of the production environment.

It should be noted that changes in the system of medical education occurred constantly, but, as a rule, they were fragmentary or episodic. Now the fact is that slow changes in the content of curriculum has occurred lately, but education has always been aimed at students gaining practical knowledge and skills [82, p. 7].

Today, higher education institutions refuse to follow typical programs and independently make decisions on the development of the structure and content of educational programs, taking into account modern achievements and changes in the field of science and technology.

Among the most important changes that occur in the field of domestic medical education, first of all, it is worth noting the following:

– joining the European and world educational space;

introduction of new requirements for the implementation of the accreditation procedure by the National Agency for Quality Assurance in Higher Education;

development of the National Qualifications Framework (description of qualification levels) [8; 196; 162].

In the light of a radical change in paradigm of education, it is assumed that a person is not only taught, but most importantly – he himself learns. Therefore, the education is aimed at the independent work of the individual, which is moving to a new level of creative development. The updated paradigm of education with a focus on the criteria of the Bologna process puts forward new requirements for the quality of education and the level of development of professional competence of specialists. In particular, the competent-oriented approach in education has initiated the need to develop modular disciplines that form a group of related competencies that ensure the formation of a professional capable of effectively applying the acquired knowledge in accordance with the new conditions [41; 154].

According to scientists (A. Migal, N. Trambovetska, N. Yeryomenko, O. Ignashchuk, V. Artemenko, etc.), the competence-oriented approach in medical education is especially important, since the formation of a future doctor's conscious attitude to the profession, the development of "soft" skills is in demand and necessary to fully both in teamwork with colleagues and in individual work with patients [82, c. 2]. The authors also emphasize that the implementation of the competence-oriented approach in the process of teaching students involves the formation in them of the ability to use the acquired competencies in real life and demonstrate the desired results, observing their own rhythm in the pace of activity [82, p. 10].

The introduction of a competence-oriented approach in medical education is focused on taking into account the following important principles:

1. The degree of education should reflect full and relevant competencies (it is understood that the definition of program competencies is carried out in accordance with the expectations and needs of the applicant himself and the demand of the labor market, society).

2. Teaching students at different paces and receiving effective pedagogical support in the educational process (medical students learn the content of academic disciplines at different speeds, so they are given academic freedom and the opportunity to master the curriculum at an individual pace convenient for each particular person).

3. Efficiency of educational resources: accessibility and flexibility (the material must be compiled at a high scientific and methodological level and posted on the official electronic platform of the university).

4. The process of transformation of competencies into training courses, educational goals and evaluation of students' learning outcomes is open.

5. Safety and reliability of the procedure for assessing the academic achievements of applicants (determination of evaluation criteria, development of clear instructions for the implementation of this procedure) [82, 112, 150, 41].

According to the above authors, subject to the above-mentioned principles of implementation of the competence-oriented approach in medical higher education, it is possible to achieve the main goal and objectives of the process of teaching medical students [ibid.].

It should be noted that today in Ukraine the emphasis on the training of doctors of a narrow specialty is transferred to the training of family doctors who provide primary medical care to family members. In the light of this the program EVRACT "Council of the European Academy of Teachers in General Practice" (2005 p.) is of special interest. This program provides a clear description of the six independent competencies of a general practitioner and describes the main aspects of each of them.

This program is a kind of guideline for medical education institutions, since it defines the essence of family medicine, as well as provides appropriate teaching methods and methods for assessing knowledge related to the formation of each of the defined competencies [82; 181]. This program is adapted to domestic medical universities, which provides tools for work on the formation of students' each competence in a particular field. In addition, this document defines which academic disciplines provide the formation of each specific competence of the future doctor [ibid.].

It should be noted that today innovative projects on the production of higher medical education, which are being developed jointly with foreign specialists, are being actively implemented in Ukraine. Thus, the Ministry of Health of Ukraine in close cooperation with the Department of Health, the Swiss Institute of Tropical Medicine and Public Health in 2018 founded the project "Development of medical education in Ukraine" [150], aimed at improving the quality of higher medical education in the country. Emphasizing the importance of implementing this project, N. Martynova, Acting Director General of the Directorate of Education, Science and Personnel of the Ministry of Health of Ukraine, noted that the fate of Ukrainian citizens in the future largely depends on the quality of today's higher medical education today, and "one of the key elements of the quality of medical care is the training of a professional and motivated doctor" [150]. It should be noted that within the framework of the reform of medical education of the Ministry of Health of Ukraine, this project provides assistance to higher medical education institutions on the introduction of educational innovations in this system and contributes to its perfection.

We would like to emphasize that in modern conditions of reforms of higher medical education, the responsibility of university teachers for the results of their pedagogical work increases significantly. In line with this, we would note that in the constituents of the higher medical school – this is a special

category of teachers who have specific functions, conditions and methods of work, qualification and personal characteristics. The perfection of higher medical education in Ukraine involves compliance with the basic principles of the Bologna Declaration, according to which each teacher of a medical university must additionally receive pedagogical education in the educational program "Teacher of Higher Education", which allows the teacher to better understand the organizational, pedagogical principles of student education in a medical university, as well as didactic basics and development and application of modern educational technologies in this institution [112; 130].

In particular, T. Sobchenko in the dissertation work emphasizes the change in the role of the teacher. Scientists (N. Voloshchuk, O. Denisyuk, A. Melnyk, O. Pashynska, A. Sayenko, O. Semenenko) also emphasize that in connection with the implementation of active, interactive, information and communication methods of teaching in the educational process of a higher medical education institution in the conditions of an "antropocentered" model of education, a modern teacher of a medical university plays the role of a mentor, trainer, provider, facilitator, an assessor to ensure the conditions for the acquisition by applicants of relevant knowledge, competencies, skills [119, p. 283].

Currently, due to the fact that digitalization is an important component of the educational process in Ukraine, digital competence of teaching staff, improving the level of digital literacy is in demand and key. In particular, this is determined in the Conceptual-Reference Framework of digital competence of pedagogical and scientific-pedagogical workers (2021) [86].

Therefore, it is important to ensure that teachers who implement higher medical education on the basis of a competent-oriented approach to the conditions of its continuity are appropriate. Moreover, this becomes possible if they use a modular model of the educational process, where the ratio of the learning load changes in the direction of increasing the independent work of

students based on their use of the relevant educational and mathematical literature and, in particular, electronic educational resources. At the same time, close interaction of students and the teacher is assumed, focused on the acquisition of relevant professional competencies [112; 120; 170].

It should be noted that the effectivity and quality of the teaching process in higher medical education institutions are determined not only by the high level of competence of the teacher in the field of relevant academic disciplines, but also by his communicative competence – one of the general competencies, on the basis of which the professional competence of a specialist who trains the future physician is built, taking into account the regulatory model of requirements reflecting the professional and pedagogical competence of the teacher [41; 86; 171].

An important task for a high school teacher is to master the skills and motivate students to independently search for knowledge outside the classroom, to teach them not only to look for information, but also to analyze, critically comprehend, verify its reliability, and then in the audience to encourage them to actively comprehend the educational material, which is a necessary condition for its mastery [137, p.114].

As noted earlier, medical universities are the most popular higher education institutions among foreign applicants [5]. In particular, the Strategy for the Development of Medical Education in Ukraine states that in 2017-2018 academic year, more than 23 thousand foreign students receive medical education in Ukraine [117, p. 5].

As scientists (A. Artemenko, K. Vasilieva, M. Dudchenko, L. Levchenko, V. Svyrydyuk) state, a necessary prerequisite for the effective training of foreign students of medical specialties, as well as students of another profile, is to ensure their adaptation, since the process of training students cannot qualitatively occur in isolation from the socio-cultural environment of the receiving party [124]. The process of adaptation of foreigners to the social and

cultural environment occurs for a long time, and at first they often even experience the so-called cultural shock. According to experts, the effectiveness of this adaptation process primarily depends on the following factors:

- individual characteristics (character, temperament, requests) of students;

- the level and quality of the basic training received;

- formation of professional and personal qualities of teachers [124].

Taking into account the high social significance of the professional activity of a doctor, it should be noted that the task of the university to ensure the successful adaptation of foreign students is of particular importance today. As a rule, future foreign doctors, getting to Ukraine for the purpose of obtaining higher education, first enter the preparatory departments (faculties) of the medical university.

According to experts, foreign students studying at these preparatory departments (faculties) experience the following educational and cognitive difficulties during the period of their sociocultural adaptation:

language barriers;

- the need to overcome significant differences in the education systems of Ukraine and the native country for a foreigner;

- the presence of differences in the organization (forms, methods) of the educational process in Ukrainian universities and institutions at home of the student;

- informational and content saturation of training sessions;

putting forward new requirements for monitoring the knowledge of students;

- the need for future foreign doctors to master the skills of independent educational activities;

262

- establishing communications in the process of interpersonal communication [123].

The problem of improving the quality of higher education is currently a popular issue in the context of the competitiveness of all their higher education institutions without exception and is the subject of study of many scientists, researchers, practitioners, etc. Focusing on foreign students studying in medical specialties, it should be noted that the outlined difficulties hinder the achievement of the formulated goals and objectives of the educational process. Thus, at the stage of training at the preparatory departments, a special place is occupied by the complex mastery of speech activities by applicants, developing their skills and abilities, therefore, starting from the first classes, teachers should contribute to the development of students' phonetic skills, to ensure their training in vocabulary material, namely: students reveal the essence of each term, they work with a dictionary, learn to read this word correctly and use it appropriately in oral and written speech. According to experts, this approach contributes to the faster and easier adaptation of foreign students, and as a result - the successful assimilation of knowledge in the educational and professional communication environment [ibid.].

Nevertheless, an important requirement for the organization of the educational process in a higher medical education institution is that the student does not have a passive, but an active position in the classroom, is an initiative participant in pedagogical interaction. Students are invited to solve problems and related to the calculation of plasma density in the blood, the work of the ventricle of the heart, the kinetic energy of a portion of blood during its movement in the aorta, the pressure of om saline on the piston of a medical syringe, the calculation of the amount of heat released during thermal procedures, etc [ibid.].

According to the conclusions of scientists (Y. Berezniak, K. Gorodnov, V. Ignatenko, T. Oleshko, V. Luzina, S. Makuha, T. Shcherbakov, etc.), the

subject content of the future professional activity of the doctor should be modeled using well-selected didactic methods, forms, means, as this allows:

to form the right ideas of students about the role of scientific knowledge in future professional activities;

- to ensure the development of stable vocational motivation among applicants;

- stimulate active cognitive activity of foreign subjects of study;

- to exercise an effective influence on the development of logical thinking and speech activity of the individual;

- to provide the process of training foreign students of medical specialties at the preparatory department (faculty) of an adaptive nature [123].

It should be noted that the intensification of the learning process of foreign students of medical profile should be carried out taking into account the educational capabilities of modern information technologies, new learning conditions, where much of the time is devoted to independent study of educational material. In particular, the organization of independent work of applicants at the proper didactic level contributes to:

 improving the quality and strength of students' assimilation of knowledge in various academic disciplines;

- development of cognitive processes in foreign applicants;

- improving the quality of their cognitive and speech activities;

- intensification of attention and memory of students-applicants;

- facilitating the process of their adaptation in domestic higher education institutions [123, pp. 667-668].

According to the conclusions of specialists, the training of students' skills and abilities of independent use of teaching aids, textbooks should take place at all stages of training:

– presenting new material;

264

- consolidation of the acquired knowledge by students;
- check of the homework they have done;
- preparation for practical classes;

- preparation for the implementation of the current and final assessment of the academic achievements of foreign students, etc. [123, pp. 668-669].

At the preparatory department (faculty) the problems of educational adaptation of foreign students should also be solved. In particular, the study of the work of teachers-practitioners shows that one of the ways to solve this problem is the transition of higher education institutions from the traditional model of education, which is dominated by information and accumulative principles of the implementation of this process, to a student-centered model operating on the basis of taking into account the principle of individual psychological characteristics of the individual. According to practicing teachers, the implementation of an individual approach allows you to:

- to take into account the personal abilities of the student, the level of their training, the tendency to perform analysis, the type of memory, the dominance of auditory or visual analyzers in relation to the independent performance of tasks;

– promptly study the mental characteristics and typical character traits of students of a certain race or nationality and, based on their consideration, organize the educational process, in particular, adjust the content and scope of homework, provide appropriate pedagogical assistance in overcoming the difficulties of applicants;

– determine the amount of assimilation by foreign students of compulsory program material, as well as additional information that allows stronger applicants to quickly move forward [ibid.].

Also, an equally important requirement for the education of foreign students is the consideration by teachers of the national, cultural, pedagogical traditions of students, the peculiarities of their native language and the use of this in the learning process. Undoubtedly effective is the provision of psychological assistance to students with regular monitoring of the quality of his work.

In the context of the problem raised, considerable interest was aroused by the results of the research of I. Melnychuk and O. Yatsyshyna on the study of various aspects of the adaptation of foreign students and the peculiarities of their education. In particular the authors emphasize on the necessity to choose new forms and methods of study, development of innovative pedagogical technologies. To specify their opinion, scientists give an example about the possibility of studying social disciplines by foreign students that are not professional in medical universities, and therefore fewer hours are devoted to studying these disciplines compared to specialized disciplines [117, p.120].

Usually, foreign students study humanitarian disciplines during the first two years of study, and the meager number of hours to study them encourages teachers to seek and select innovative pedagogical technologies, modern active forms and teaching methods to ensure the effectiveness of training [113, p.120]. At the same time, I. Melnychuk and O. Yatsyshyn draw attention to the fact that foreigners' study of the disciplines of the humanitarian cycle, in particular the history of Ukraine, life safety, philosophy, history of Ukrainian culture, etc., contribute to the successful adaptation of the individual [ibid.].

The scientific works of J. Ragrina were also useful for the research, which revealed the use of software tools for teaching foreign medical students in classroom and extracurricular work, and this, in turn, determines the relevant requirements and features of training future doctors. As noted in the previous paragraph, with the onset of the COVID-19 pandemic, the use of advanced digital and computer technologies to improve the quality of the learning

process, as well as motivate students to master professionally important knowledge and skills, is in demand. In particular, today in the organization of distance and blended learning of students and, in particular, foreigners, video conferencing, electronic textbooks and manuals, network technologies, e-mail, digital services and applications, etc. have gained popularity.

In her scientific work J. Ragrina noted that foreign students, as a rule, have a positive experience with computer programs, modern computer technologies, and this facilitates the work of teachers and improves the quality of knowledge and cognitive interest of students [151, p. 105]. Therefore, the scientist advises to widely use interactive teaching methods in classroom and extracurricular classes namely: business and role-playing games, various training exercises, brainstorming, conversations, educational discussions [151, p. 99]. At the same time, interactive teaching methods can be used both online and online.

Investigating the problem in teaching foreign students of medical specialties, I. Krytsky identified the following ways to improve the quality of higher medical education:

ensuring consistency and continuity in the teaching of academic disciplines throughout the entire period of study;

 organization of the educational process in the conditions of purposeful use of self-control by foreign students;

- stimulating the development of their motivation for independent work;

improvement of the educational process on the basis of the conscious application by all its participants of the accumulated knowledge and skills [93, p. 19-22].

According to the above-mentioned author, the high quality of higher education implies ensuring a close relationship between education and science, as well as theory and practice, and the use of modern educational technologies will contribute to the improvement of the content, structure, forms, methods of training future doctors [ibid.].

In the context of the need to combine the organization of training of students of the medical university in the format of online and off-line teachers are forced to choose today a model of blended learning, but at the same time they should consider:

- the level of education of students;

- the place of the educational component in the curriculum;

- form of organization of training (full-time, part-time, dual);

- the number of hours (classroom, independent work) allotted for the study of the educational component;

- the specifics of the faculty;

- formulated goals, objectives, expected programmed results of the educational component;

- compliance with the content of educational material;

form of control of educational and cognitive activity (oral or written, credit or exam);

material and technical equipment and support (access to the Internet, equipment, equipment, their number);

- the level of digital competence of the teacher and students for higher education, possession of information and communication technologies;

- the level of educational achievements of students [166, p. 126].

It is worth noting that modern educational technologies are based on the education system, where learning takes place as a process not so much of knowledge transfer as of ways, forms, methods of acquiring them, the formation of creativity, which changes the structure of mental activity of future specialists using the knowledge gained in professional activities [154; 171; 120].

Quite widely in higher medical education institutions, teachers use problem-modular training, which allows to formulate the skills of creative assimilation of knowledge among students, develops the ability to independently solve professional problems with the accumulation of certain experience in creative and professional activities, forming learning motives, interest in future professional activities, scientific and cognitive needs, etc. [154]. Let us clarify that the development-modular training consists in creating a problem situation with the formulation of the problem in the module, the presentation of knowledge with the subsequent organization of students' independent work to solve the problem identified by the teacher [154; 120; 170] Summarizing the above, it should be noted that problem-modular training involves:

- interaction of the teacher with students;
- creating a problem when explaining a new topic;
- creating conditions and feasible resolution of the situation;

 directing problem tasks not only to the application of knowledge in one discipline, but also from related disciplines, and in some cases – additional classes held outside the programs.

The research work of students is also considered as a type of problembased learning, since they reveal the possibilities and abilities for research activities and form a system of skills for creative search [154; 120]. The important components of problem-based education is flexibility and correlation of the educational material presentation. The indicator of the rationality of using problem-based education is students' demonstration of the interest in the subject of study, especially in independent activities in the field of this academic discipline.

Also, the improvement of the quality of the learning process of future medical specialists is facilitated by the process of intensification, namely the regulation of the workload of students' educational activities, which is

impossible without knowledge and skills in the use of didactic teaching methods [154, p. 90]. Methods that reflect the peculiarities of activity in the conditions of intensification, provide for the refusal to take notes and provide students with reference literature. without alternating with other disciplines [154, p. 90-92]. Intensification does not essentially change the learning process, but is ensured by the joint activities of the teacher and students [ibid.]. It should be noted that in higher medical education institutions it is usually possible to distribute in this way the study load for foreign students and prevent overload in the classroom.

Optimization of the learning process of students of the specified category is achieved through the use of expedient teaching methods, the selection of the main and secondary tasks and the analysis of the results of educational and cognitive activity of a person [40; 137]. Taking into account this fact, the teacher of higher educational medical establishment should demonstrate scientific, methodical and organizational levels of professional skill, to be competent and competitive.

An important component of the learning process is the organization of control of educational and cognitive activity of foreign medical students. It should be noted that there are two types of assessment: summative and formative. Formative assessment methods include the following: questions to repeat the material at the beginning of the lesson, intermediate testing, interactive online surveys, feedback in groups; filling out self-assessment questionnaires [82, p. 27].

Summarizing the above, it can be noted that the current requirements for the education of foreign students of medical specialties reflect the general requirements for the organization and implementation of the educational process in modern higher education, specific requirements for the training of applicants for higher medical education and at the same time specific requirements for the education of foreigners in the domestic institution of higher medical education, due to the peculiarities of working with them and the need to ensure their readiness effectively perform professional duties of a doctor at home or in other countries.

3.3 Specifics of the formation of information competence in international medical students in the educational environment of the university

3.3.1 Essence and composition of the educational environment of the university

At the beginning of the third millennium, taking into account the global changes in all spheres of society, the trends in national higher education systems, the transformation of strategies for the development of higher education institutions in competitive conditions, an urgent and logical issue is the need for an adequate, high-quality, competitive system of higher education and, in particular, medical higher education. At the same time, the principal function of the modern education system is to create an appropriate educational environment that will enable future specialists to build their own individual educational trajectory, which is necessary for the effective achievement of professional tasks.

The research found that the study of the phenomenon of "environment" for a long time (several decades) was carried out by both domestic and foreign experts in the field of philosophy, psychology, pedagogy and other sciences. In the reference literature it is defined as "a set of natural conditions in which the vital activity of an organism occurs" [26]; "surrounding, a set of conditions in which the activity of human society takes place", "environmental conditions, environment, set of people who are bound by common conditions" [122, p. 1906], a holistic, integrated factor of development and self-realization of the individual, which determines the model of his behavior, features of activity and

communication as a result of active interaction of the individual with the environment [165, p. 71].

Since the interpretation of the concept of "environment" revealed both similar and different views of scientists, we consider it necessary to clarify the definition of the essence of this phenomenon. So in scientific pedagogy literature environment is defined:

structured situation in a certain way in which a person acts as an active subject and is capable of modeling himself and his behaviors (M. Basov)
[11];

- an environment containing a set of natural, material, social factors that either directly or indirectly affect the individual (M. Bratko) [20; 21];

- a set of conditions that surround a person and interact with him as a natural organism (A. Bogush, N. Gavrish) [19];

- the part of the space in which a person resides and with the help of which his way of life is formed, which mediates the development of this subject and averages it (Y. Manuilov) [105];

a set of certain conditions and influences surrounding a person
(D. Markovich) [107];

- the area of activity of the subject; the integral unity of man and his environment (E. Zaredinova) [65; 66];

human environment, a set of natural, social and substantive external conditions, factors, circumstances that ensure its formation as a person (O. Kabatska) [73; c.155].

It is important to note that next to the concept of "environment", some scientists use the concept of "space" that is close in meaning, but there are certain differences in the meaning of these concepts, such as: space includes several environments and acts as a kind of field for their interaction; space in relation to the environment acts as a construct of a higher order; space, unlike

the environment, can exist without a person [52; 73; 100]; the environment is connected to the space by a certain defined system by the area in which this system functions and develops [73; 109].

In the process of conducting a scientific search, such a kind of environment as the educational environment was of particular interest. Problems and the creation of an educational environment in a higher education institution is of particular relevance. This is primarily due to Ukraine's entry into European and world community and the focus on modern European standards.

Analysis of the scientific and pedagogical literature shows that scientists interpret the concept of "educational environment" in somewhat different ways, which prompts to highlight the most common definitions of the outlined definition.

Thus, G. Polyakova under the educational environment understands the complexity, open dynamic and integrative systems in the field of education [134, pp. 79-80]. V. Serikov defines the educational environment as a combination of certain factors that provide:

 manifestation by a person of an activity and the desire for selfmovement (social requirements, norms, status and role expectations);

 availability of certain sources of information, opportunities for its analysis and analysis of accumulated experience by the subjects of study (information, defined academic disciplines and goals of educational activity);

 determining the capabilities and tools to achieve the goals (resources, partners, tools, methods, databases, libraries, teaching staff, mode, set of specializations);

– providing favorable opportunities for communication and all participants in the educational process (teachers and peers, their cultural potential, common tasks and projects, space-time organization of communication, access to world information networks);

273

- organization and implementation of the relevant pedagogical process (purposeful educational, developmental and educational activities, actualized situations of assimilation by students of various types of experience, as well as the experience of their own personal self-determination) [65; 159; 160].

According to O. Yaroshinskaya, the environment is a natural or artificial environment of a person, reflecting the content, methods and organizational forms of the educational process, which ensure the comprehensive development of the personality, its productive activity and communication [219, p. 57]. The researcher believes that the environment necessarily interacts with the individual and exerts a constant, systematic influence on it, as well as the personality itself can change the environment and fill its content [219, p.53].

T. Gushchyna and T. Ilyina argue that the educational environment is a set of spiritual, material, psychological and pedagogical conditions for the functioning of a higher education institution, ensuring the disclosure of abilities, inclinations, individual characteristics of the individual) [46; 68]. A. Katashov and O. Qiunyak under educational environment understand:

functional and spatial association in all subjects of education,
between which established close diverse interrelated group bundles;

- model of the sociocultural space where the formation of the personality takes place, creative potential, creative self-expression, social activity, which is aimed at research, creative, practical activities, etc., are realized;

- a center of spiritual and creative communication, where both humanities and relations are established between the participants of the educational process, partnership cooperation, tolerant communication;

- information and organizational spheres with the possibility of widespread use of modern multimedia means of information search, development of distance learning, etc. [76; 206].

According to E. Mamontova, the educational environment of a higher education institution is a multidimensional pedagogical phenomenon with a complex architectonics and a space in which the student makes a knockout and then implements the individual educational trajectory [104, pp. 12-16]. E. Mamontova proves that a well-created educational environment has a significant impact on the development of personal competencies of students who interact with each other as a subject of the educational process and, in particular, as full-fledged subjects of value and personal-professional communication, as well as with educational resources. environments [ibid.].

L. Ostapenko believes that the educational environment is an integral system of social relations in the field of education and at the same time a peculiar place of intersection of joint activities of all participants in the educational process with the provision of activation of their creative potential [125, p.14]. the luminous environment is characterized by:

- multilevel and complex interconnections;
- the volume and quality of educational services;
- intensity of information;
- interaction of different educational systems and a certain culture;
- the ability to meet the educational needs of students;

 ensuring personal development and self-development of participants in the educational process;

- attracting students to independent intellectually creative work [ibid.].

L. Ostapenko also notes that effective and full-fledged development of the personality is possible only because of its activity, which is aimed at a certain definite result.

So, it can be summed up that a significant number of scientists under the educational environment understand the totality of all educational factors as parts and social environment of a person that directly affect the person in the process of his learning, upbringing and development

In the process of carrying out scientific research, the scientific works of O. Kabatska also were useful, who singled out the following main approaches of scientists to define the concept of "educational environment":

- as a set (system) of relevant conditions, circumstances, factors;

- as the implementation of a certain model of organization of the educational process;

- as a pedagogical reality;
- as an educational space [72, p. 161-168].

Based on the consideration of different points of view of scientists O. Kabatskaya under the educational environment understands an integrated set of natural social and subjective external conditions, factors, circumstances that in a certain way affect the course of the educational process and its results, as well as determine the degree of effectiveness of the process of personal formation of each subject of study [72, p.167-168].

The scientific views of scientists were also useful on the definition of educational environments and as: multilevel systems in the created conditions, which is provided by certain parameters of the educational process in its content, resources, procedural and effective aspects (B. Slobodchikov); a form of communicative interaction (cooperation), creating special types of unity (community) between the subjects of the educational process (V. Rubtsov); systems in the conditions and influences of the formation of a person as a person in accordance with a given social ideal, as well as favorable opportunities for its development, contained in the spatial-subject and social environment (V. Yasvin); system of influences and relevant psychological and pedagogical conditions that create optimal opportunities for the disclosure of interests, the development of the abilities of each individual in accordance with the inherent natural inclinations and requirements of age-related socialization

(B. Panov); a set of material factors of the educational process and interpersonal relations between the subjects of pedagogical interaction (V. Lebedeva, V. Orlov) [21; 57; 127; 220].

In the context of the problem raised, it is also advisable to determine the essence of the phenomenon of the educational environment of the higher educational institution. In this context a view of M. Bratco is of special interest, who understands under this concept "multi subject and multi object formation, that is purposefully and spontaneously influence on professional and individual development of the future specialist, granting his readiness for professional activity and/or continuation of education, successful fulfillment of social roles and self-realization in the process of life" [21, p. 69]. Based on a thorough study of the problem of theoretical and methodological foundations of management of professional training of specialists in the educational environment of the university, the author determined that the environment is designed primarily to provide high-quality professional training of the future specialist and create the basis for the formation of his value orientations and motives of educational and professional activity [20, p. 274].

D. Horvath considers the educational environment of a higher education institution as a space that provides the content of education with forms, methods, means of education and upbringing and within which all participants in the educational process closely interact with each other [201, p. 54]. A. Shabanov and T. Shorokhov understand this phenomenon as a set of information and communication technologies, information and educational content, as well as highly professional teaching staff necessary for the quality of the educational process [208, p. 54]. Some scientific sources determine that the educational environment of a higher education institution is a factor, a system of influences and conditions that contribute to the formation of students' motivation for self-development, self-education, successful socio-professional adaptation and professional development of future specialists [38; 100; 121].

In the vein of the study, it is also worth drawing attention to the scientific work of V. Zhelanova, which provides the definition of "professionally oriented educational environment". Thus, the author interprets this concept as "a multi-level pedagogically organized system of conditions and opportunities that contribute to the effectiveness of the process of transformation of initial activity into a professional one" [57, p. 105]. As the author considers the professionally-oriented educational environment has such specific traits:

 compliance with the requirements and needs of students regarding the similarity of the future profession;

- contradictions between educational and future professional activities;

stimulation of students to find their own guidelines in the educational process;

- variability of teaching methods for students;

 widespread use of interactive methods and forms of training future specialists in the professional direction [57, p.106].

The study also found out that S. Ivanova identified the following characteristic features of the educational environment from the standpoint of non-classical methodology: activity, subjectivity, situationality, evaluation, formative impact on environmental subjects, projectivity, variability, uncertainty, connection with time and space [67].

According to L. Ostapenko, in recent years, the concept of "educational environment of a higher education institution" has acquired a somewhat new status, and therefore this concept in a certain degree of narrowed meaning refers to the environment in which the personality of the future specialist is formed and, in particular, his professional attitude. According to the author, such an environment includes educational and methodological tools both in electronic and paper form, as well as a set of technical and software tools for storing, processing and transmitting information that provide prompt access to the necessary data and carry out educational scientific communications relevant to

the realization of the goals and objectives of education, the development of science. in modern conditions. At the same time, modern forms and means of organizing the process of teaching students in the educational environment of a higher education institution by increasing the clarity of the presentation of the material, ensure high efficiency of classroom and extracurricular work of students [125, p.15].

In the light of the raised research problem, the theoretical provisions of O. Bilyk were of particular value. attitude to learning and to the future profession in general [17, p. 166].

In the process of carrying out scientific research, the conclusions of N. Lobach also came in handy, who under the educational environment from the structure of higher medical education understands the environment in which the formation of personality takes place, in particular its formation as a future doctor [104, p. 73]. The researcher states designing the educational environment in this educational institution allows one to build and put into practice the individual educational trajectory of each applicant on the basis of taking into account the benefits and professional activities of the future doctor [104, p. 72].

Considerable interest in the study was also aroused by the views of N. Stuchynska and Y. Tkachenko, who investigated the problem of creating an educational environment of a higher medical education institution. So the authors state that designing the environment mentioned gives the opportunity to solve a number of such tasks:

- identify and reveal the potential of students for the manifestation of creative initiatives;

to develop the cognitive interests of future doctors;

 to ensure their effective solution of problem situations in cooperation with teachers, classmates, colleagues;

 to create favorable conditions for students to independently acquire new knowledge and apply it in practice;

 providing free access for all participants in the educational process to information and automating the processes of collecting, analyzing, processing the necessary information;

- automate the processing of biomedical research results [100; 180].

D. Kostenko and N. Chernukha also emphasize that the educational environment should have a humanistic orientation, because it is an effective factor in the socialization of the applicant and the development of his work, as well as be psychologically safe, which is a condition for preserving and strengthening the mental health of all participants in the educational process [90].

Since the chosen research topic is related to work with foreign students within the relevant educational environment of a higher education institution, we consider it necessary to identify the structural components of this environment. As it turned out, scientists express different points of view on this issue.

Thus, G. Polyakova identified the following components of the educational environment of the university:

- subjective (implies the presence of subjects that interact with each other through a variety of technologies, means and subject-spatial conditions);

social (focused on the formation, development, improvement and creative use by students of practical skills, competencies);

 spatial-subjective (aimed at mastering by future specialists certain means of training, in particular effective educational technologies, means of effective implementation of communication process etc.);

psychodidactic (assumes that the university has the necessary programs, systems, means, teaching technologies, depending on the peculiarities of the organization of pedagogical interaction, the style of teaching teachers) [134, p. 79-80].

280

E. Belyakov and I. Zakharova have slightly different views on the components of the educational environment of a higher education institution. functioning and further development of the environment during the implementation of the educational process [13]. Scientists Y. Kulyutkin and and S. Tarasov distinguished the following three components of the educational environment: spatial-semantic, content-methodical and communication-organizational [95].

As noted, V. Panov and I. Gaba distinguish three components of the educational environment:

 spacial-subjective (information) component, which contains material and technical equipment for conducting classes, a variety of professional and educational resources;

- social component, which is focused on space and different types of interaction between all participants in the educational process based on taking into account the principles of dialogue and partnership, the traditions of a particular higher education;

- technological component, which involves the definition of goals, content, teaching methods, as well as a reflexive assessment of the results of this process on the part of its participants [32; 127].

In the context of the problem raised, G. Kovalev's scientific views on the outlined issue are valuable. So the author states that the important components of the educational environment are presence of: physical surrounding (building-structural peculiarities of the educational establishment), personal factors (spacial and social density of objects, individual characteristics, gender-age and national peculiarities etc.) and curricula (a content of curricula, forms, methods of teaching and control, teaching style etc.) [49; 78; 220].

To a certain extent, similar ideas were expressed by O. Yezhov, who in her author's model of the educational environment identified the following constituent blocks:

 material and technical (infrastructure and material and technical base of the educational institution, sanitary and hygienic conditions);

- educational (content, forms and methods of teaching and education);

- communicative (interaction between all participants in the educational process) [55].

Focusing on the need to ensure a decent level of the material and technical block of the educational environment, O. Yezhova in the monograph emphasizes that the educational institution must be equipped with modern computer means, in particular the Internet, personal computers, a system of multimedia complexes, etc. In turn, this is a necessary prerequisite for the possibility of using innovative information technologies by participants in the educational process [ibid.].

L Vashchenko has a fundamentally different view of the structural components of the educational environment of a higher education institution. Thus, he believes that the main mission of this environment is to generate innovative flows, increase innovation potential, preserve local and administrative innovations of the university. In accordance with this, the educational environment should have its own organizational and functional structure, the main components in which are the following:

- education development strategy;
- tactics of formation of innovative processes;
- content of the environment;
- organizational support;
- forecasting the development of education [25; 90].

In determining the structure of the educational environment of the institution of higher education the scientific conclusions of M. Bratko were also useful, who implies to single out the following components: personal, axiological-semantic, information-and-content-oriented, organization-and-

activity-oriented and spatial-subjective [20, p. 275-276]. So the author states that the component of this environment implies the active interaction of all subjects of the educational process in quantitative and qualitative dimensions, because the formation and development of the educational environment depends on the human resource, on their relationships with each other, interaction, mutual influence, relationships, etc., which will certainly affect the quality of the result of the educational organization [20, p. 275].

Axiological-semantic component (mission, strategy, values, traditions, etc.) provides a conceptual theoretical basis for strategic management decisions; has an indirect impact on the behavior of members of one educational community. The information-and-content-oriented component includes regulatory documents, projects, educational programs regulating educational activities and the interaction of its participants. interactions of all participants, as well as management mechanisms, in particular student self-government [ibid.].

We found also useful the findings of T. Zakusilova on the structural components of the educational environment created for foreign students in the institution of higher medical education, namely:

- subjective (interaction of foreign students of medical specialties with various subjects, means, technologies activates the development of cognitive processes in future specialists, their assimilation of the necessary skills and abilities, enrichment of their personal experience);

social (related to the process of formation of professional skills, abilities, competencies in future doctors);

 productive-activity (provides improvement of students' known actions and operations, creation of favorable conditions for their activities and, in particular, for independent search for information);

- spatial-subject (involves the mastery of effective technologies by students through the implementation of their communication with other subjects) [62, c.124; 63, c. 53].

283

It is also advisable to note that the scientific literature defines the following basic requirements for the educational environment and the higher institution of higher medical education:

– it should be aesthetically attractive for medical students. At the same time, its elements such as architecture, room design, personalized classrooms, computer classes equipped with the Internet are of no small importance. In this environment, it is mandatory to have modern training tools, appropriate equipment, simulators, various phantoms, laboratories, virtual simulators which are as close as possible to real clinical situations, as well as the presence of a sufficient number of mannequins to work out algorithms for certain professional actions;

- since the content of education must meet the modern requirements of training future doctors, when designing the educational environment in a medical university, it is necessary to take into account modern approaches to the implementation of medical education, innovative concepts of training future doctors. As there is competitiveness of higher medical educational establishments on internal (within the country) and external (globally) arenas, expansion of the market for export of educational services, search for potential foreign partners, of particular importance for the successful activity of the university acquired the presence and organization of productive pedagogical management;

- this environment should be characterized by comfort for all participants in the educational process. The necessary prerequisites for a comfortable educational environment for students are, first of all, a friendly atmosphere for communication, the creation of situations of success, the possibility of manifestation in improvisation, effective interaction with the teacher-mentor, which is a trigger in the process of enhancing the professional capabilities of future doctors. satisfaction of professional, psychological and pedagogical needs of all participants in the educational process, as well as in the

provision and possibility of creating and implementing an individual educational trajectory for each applicant;

 demonstration by pedagogical and pedagogical staff of the university of high level of the professionalism, pedagogical skills and general culture;

 favorable conditions for the formation of a competitive specialist in the field of medicine, his comprehensive harmonious development as a person;

- the institution of higher medical education has a high rating and a positive image not only in Ukraine but also abroad [62; 152; 185].

Based on the foregoing, it is determined that two aspects can be distinguished in the educational environment of the university: *subjective* and *technological*. The former reflects the process of cooperation of all the participants of the educational process and also creating proper conditions for effective adaptation of international students through providing an efficient pedagogical support by teachers and curators.

The technological aspect of the environment should be considered in the context of the need to increase the efficiency of the organization of the process of teaching foreign students of medical profile, which ensures the formation of their professionalism.

As determined in the process of conducting the study, *the educational environment of the university, in which foreign students of medical specialties study, is an integral set of material and sociocultural factors, psychological and pedagogical conditions specially organized in this institution, which determine the course of the educational process and ensure the formation of students as competent specialists and comprehensively developed personalities.* Taking into account different points of scientists, it was also concluded that this environment includes the following components: spatial-semantic, content-andtechnological and organizational-and-communicative.

Thus, *the spatial-semantic* component of the educational environment reflects the architectural and aesthetic organization of the living space of the

participants in the educational process (architecture of buildings of the university, interior design of classrooms, laboratories and recreational premises) and the specifics of the sign-corporate space, reflecting the corporate culture of physicians and this particular educational institutions (coat of arms, anthem, uniform, traditions, holidays, etc.).

The content and technological component of the educational environment of the university determines the content of medical education, the content and technological support of the learning process of foreign medical students (the concept of implementing this process; educational curricula; classroom fund, methodical and educational literature, availability of technical equipment for the Internet, library and, in particular, electronic resources, etc.), as well as the organization of the learning process of these students (forms, methods, teaching aids, educational technologies, etc.).

The organizational and communicative component mirrors the features of both the participants of the educational environment (their social statuses and roles; age, national and gender characteristics; personal value orientations, interests and aspirations of each subject) and their communication in the educational process (teaching style and business communication, providing pedagogical support, a favorable psychological atmosphere, building tolerant and respectful relationships between all students and teachers).

3.3.2 Theoretical issues of information competence formation in international medical students in the educational environment of the university

Highlighting the theoretical issues of the formation of information competence of foreign students of medical specialties in the educational environment of the university, we consider it appropriate to first characterize this environment in more detail, because it has its own characteristics.

According to I. Yasvin, the following parameters of the educational environment influence the success of the adaptation of students:

modality – qualitative and content characteristic of the environment,
reflecting the degree of use by foreigners of its adaptive capabilities;

 latitude – structural and content characteristic that allows you to find out which objects, subjects, phenomena, processes are included in this environment;

 intensity – structurally intensive characteristic, certifying the degree of saturation of the educational environment with favorable conditions for adaptation of students, opportunities, influences, as well as strength, concentration of their manifestation;

 awareness – an indicator of the conscious involvement of all participants in the educational process in the created environment;

 emotionality – reflects the ratio of emotional and rational aspects of the educational environment;

generalization – reflects the degree of coordination of all participants
subjects of the created environment;

 dominance – characterizes the importance of the created local educational environment of the university in the general value system of all its subjects [220, p. 112-142].

- T. Zakusilova emphasizes that the creation of an educational environment adapted to the needs of future doctors in a higher medical education institution provides:

involvement of students into the "improvised field of activity" to create a professional atmosphere and stimulate the development of practical skills and abilities in them;

assimilation of program material by future doctors through their involvement in creative project activities;

287
- reflexive self-organization of students, development of their intellectual sphere;

 development of students' independence, their acquisition of experience through the performance of professional functions;

- awareness by future doctors of the importance of professional appointment in the field of health care;

search and implementation by all participants of the educational process of new technologies for solving tasks, solving existing problems [61, p.176-177].

According to B. Kreminsky, the educational environment in a higher education institution generally performs the following functions:

1. This environment should create an atmosphere of demand, prestige of the profession in the institution, stimulate the development of cognitiveeducational, social, professional interests of students (psychological aspect of the functioning of the environment).

2. The educational environment should ensure that each future specialist is able to acquire knowledge in accordance with his own individual interests and needs (content aspect).

3. This environment involves the creation of a favorable environment for the professional and personal of each applicant, the effective application of the acquired knowledge and skills in practice, the development of their own abilities and inclinations (practical aspect).

4. The educational environment should be characterized by modern material and technological support of the educational process in accordance with the existing requirements, that is, this process should be provided with modern computers, laboratory devices, tools and visual means, didactic and methodological manuals and manuals, etc., which means that participants in the educational process should be given the opportunity to use modern technology

and innovative information and communication technologies (technical and technological aspect) [92, p. 104].

Describing the educational environment of the medical university, within which the process of teaching foreign students is carried out, it is important to note that this environment can be significantly different from the traditional educational environment that existed in educational institutions in their native country. In light of this, it is important to emphasize that the educational environment created for foreigners should perform not only the above functions, but also adaptation functions. Moreover, it should be noted that the quality of the implementation of this function significantly affects the possibility of performing all other functions of the educational environment.

As O. Bakalo emphasizes, if at least one of the participants in the educational process is a foreigner, then the educational environment of the university will act as an intermediary between him and the environment of the country of study [9, pp.58-59].

It is also advisable to note that the majority of foreigners study together with Ukrainian students, that is, in the same academic group. There is also the fact that foreign students who have been expelled from other higher education institutions for failure often study at the preparatory departments. It is lecturers and curators who have to help these students overcome difficulties in the field of educational activities, to adapt to the new system of education, new communication; they play an important role in ensuring the adaptation of foreigners.

Due to the increase in the number of foreign students in the higher schools of Ukraine and the increase in requirements for future medical workers, today the need for teachers who teach foreigners to carry out high-quality pedagogical education and pedagogical support has been significantly actualized. We would like to clarify that under the concept "pedagogical support" the scientists understand as a rule a multi-levelled cooperation of all

subjects of the educational process, when students receive qualified assistance in the formation of the orientation field of their own professional development and individual psychological and pedagogical support [10; 14; 37; 158].

As stated in the scientific literature, quite often foreign students are unable to independently effectively solve the problems of adaptation that arise in a foreign country, in particular due to the low formation of relevant social skills that are necessary for individuals to successfully overcome the existing difficulties in society [37; 226; 229; 233; 237]. Based on this, foreign students also need help from teachers and curators to master thesis social skills, and this, in turn, will directly positively affect the livelihoods of foreign students in general and, in particular, the process of their learning.

It should be noted that today it is difficult to overestimate the work of the curator of foreign medical students, because it requires daily actions to solve educational, domestic, socio-cultural and other problems of foreigners. students, and on the basis of this, to provide operational pedagogical support to them, to provide effective pedagogical support to foreigners throughout the entire period of their studies at a higher education institution.

As D. Valeeva and L. Spiridonova emphasize, that with the implementation of qualified pedagogical support of foreign students by teachers and curators, the organization of effective interaction with students helps them to successfully solve the following complex problems and difficulties:

 immersion of foreigners in a new cultural atmosphere, characterized by new social norms and values;

- communication in the languages that is non-native for them;

 feeling worried by young people due to the lack of a number of parents, relatives and other people close to them;

- unconventional and unusual living conditions;

- the need for foreign students to use an unusual meal for them, which can cause problems with their health [24, p. 23].

Scientists (V. Golovko, O. Dobrynina, T. Kiyashchuk, A. Osipenko, O. Segeda, L. Tarita, G. Foroponov, etc.) also emphasize the need for the creation and development of special support services in a higher education institution, as well as the need to develop implementation of individual and collective-oriented programs to accompany foreigners during their studies in higher education [37; 51; 77; 156; 158; 188; 195]. These scientists also identified or the main factors that predetermine the need for such support, namely the following:

- the importance of forming an optimal structure of vocational motivation among foreign students;

- the need to rely on the internal potential of any system, including man as a unique living system;

 opening up new opportunities for the processes of individualization and differentiation of education in higher education, ensuring the right of students to make certain choices in the educational process;

 general understanding of personality development as a process of solving certain problem situations, a mechanism for overcoming existing contradictions;

 ensuring the implementation of personally oriented education, as well as the support of the individual in the construction and implementation of its own individual curriculum and personal trajectory of professional and personal development;

- the important role of the independent activity of the subject of development as the main prerequisite for assisting him in preventing and overcoming existing problems [37; 51; 77; 156; 188; 195].

- We would like to note that, according to I. Yasvin, the following parameters of the educational environment affect the success of the adaptation of students:

modality – qualitative and content characteristic of the environment,
 reflecting the degree of use by foreigners of its adaptive capabilities;

 latitude – structural and content characteristic that allows you to find out which objects, subjects, phenomena, processes are included in this environment;

 intensity – structurally intensive characteristic, certifying the degree of saturation of the educational environment with favorable conditions for adaptation of students, opportunities, influences, as well as strength, concentration of their manifestation;

 awareness – an indicator of the conscious involvement of all participants in the educational process in the created environment;

 emotionality – reflects the ratio of emotional and rational aspects of the educational environment;

generalization – reflects the degree of coordination of all participants
 subjects of the created environment;

 dominance – characterizes the importance of the created local educational environment of the university in the general value system of all its subjects [220, p. 112-142].

As it was found out in the study, effective sociocultural socialization of foreign students contributes to ensuring the purposeful formation of information competence in them. After all, the basis of this socialization is the formed knowledge and skills of a person, allowing him to assimilate the cultural heritage of the receiving party. In addition, the information learned by the subject becomes the basis for understanding his own life experience.

Highlighting the issue of adaptation of foreign students to the information culture of Ukraine, M. Voloshan and G. Voloshan note that by ensuring the dialogue of cultures, that is, the exchange of information on the basis of stable similar information components, students gain knowledge about the information

environment, and subsequently acquire the skills and abilities necessary for orientation in modern information flows [30, p. 32-34].

Therefore, it can be summed up that the provision of pedagogical support for foreign students of medical specialties in the process of their adaptation should also cover the formation of information competence of students, which largely determines the effectiveness of this process.

It should be noted that in the study of particular interest were scientific works devoted to the problem of educational interaction and, in particular, the provision of pedagogical support to foreign students by teachers and students during the organization and implementation of the learning process of these applicants in higher education. Within the framework of the mentioned I. Semenenco considers it expedient to create a unified system of pedagogical support for foreign students, which would ensure the coordination and control of interaction in all divisions of the higher education institution [157; 158].

Based on the study of scientific literature, it was concluded that the implementation of pedagogical support for foreign students will effectively influence the organization and implementation of the process of their education in the educational environment of the university, if it is provided:

 continuity and systematic implementation of pedagogical support for foreigners throughout the entire period of their higher education;

– individual approach to the organization and implementation of training of future foreign specialists on the basis of taking into account their personal interests, the needs of their personal capabilities and the level of training;

- priority of self-study of students;

- the demand for the results of their training in practice;

 providing pedagogical support to future specialists at different levels of management: rector's office, dean's office, department, each individual teacher and curator.

In the context of the problem raised, the theoretical provisions of O. Bakalo, formulated by her on the basis of taking into account the classification of types of educational environment (dogmatic, career, carefree, creative) developed by B. Yasvin. In her scientific work, the author analyzed how the environment of a certain type will accordingly affect the development of foreign students and their manifestation of dependence on the teacher. According to the researcher's conclusions the dogmatic educational environment promotes the passivity of students and their dependence on the teacher. Career-oriented environment has a positive impact on the development of students' activity, but at the same time ensures their dependence on the teacher. A carefree educational environment activates the free development of the student's personality, but at the same time encourages him to show passivity. The creative educational environment ensures the free development of the student as an active person [9; 220].

As O. Bakalo notes, when creating an educational environment for foreign students in a domestic university, one should consider what type of environment is traditional for teaching immigrants from different countries. For example for the citizens of Eastern Asia (China, Mongolia, Vietnam etc.) the typical is a dogmatic educational environment. So the author considers it reasonable at the beginning of their study to organize the cooperation of a dogmatic character (for example to apply explanatory, illustrative and reproductive teaching methods involving the translation of ready-made information to students with its subsequent reproduction), and only later gradually move on to the use of teaching methods that imply a greater degree of freedom for students, in particular in the search and processing of new information [9, pp. 59, 60].

Revealing the features of teaching foreign students in the educational environment of domestic higher education institutions, I. Semenenko considers it necessary:

- to account for the previously accumulated life experience of students;

to contribute to the acquisition by them the skills of independent work;

- gradually familiarize future specialists with the content of their future professional activities;

 to be guided by data on the individual mastering of knowledge of the subjects of study during the implementation of interdisciplinary coordination of disciplines of the general education cycle;

to implement a differentiated approach to the organization of the learning process of students;

- to create new educational tools together with language teachers for the possibility of high-quality assimilation by students of the submitted information [157, p. 33].

I. Semenenko also notes that some foreign students are not sufficiently motivated to receive a professional specialty and, as a result, have a low level of academic performance [ibid.]. In light of this, O. Bilous proposes to solve this problem to provide stimulation of the development of the motivational sphere, the interest of foreigners, the formation of new cognitive needs in them [18].

One of the ways to solve this problem is the purposeful formation of information competence of students, which allows them to select and process information within the framework of their own cognitive interests and professional needs. In turn, this has a positive effect on the development of motivation of future foreign doctors.

So, it can be summed up that while modeling a comfortable educational environment in a higher medical education institution for foreign applicants for medical specialties, it is necessary to take into account which countries they came from, what sociocultural characteristics are inherent in it as

representatives of a certain ethnic group and what features a typical educational environments in their homeland possesses. In addition, the educational environment should contribute to the establishment of humanistic interpersonal relations between all its participants, stimulate them to effectively interact with each other, as well as encourage each foreign applicant to develop his own professional activity and mobility.

It should be noted that in the process of forming the information competence of foreign students of medical specialties in the educational environment of the university, it is supposed to use both traditional (printed textbooks, manuals, collections of scientific articles, medical encyclopedias, simulators, fragments of popular science films, etc.) and innovative means of information (information and communication technologies, multimedia, etc.). Moreover, it is obvious that at the present stage of development of the information society it is innovative means of information that are becoming widespread. In line with this, it is advisable to characterize in more detail the technological component of the educational environment of the medical university.

Thus, revealing the content of this component, L. Ostapenko notes that the modern educational process in the domestic higher school cannot be imagined without the inclusion of information and communication resources in it, as well as without the purposeful development of students' skills and abilities to work with these resources. At the same time, in the field of education, it is necessary to promptly take into account the changes in all spheres of modern life of each person, because any such changes are a signal for the need to carry out an appropriate adaptation of the education system [125, c . 14].

Some other scholars (C. Dotsenko, I. Kohut, V. Lebedeva, I. Litovka, O. Mokroguz, T. Sobchenko etc.) also note that the use of modern technical devices and information technologies in the educational environment, that is, the informatization of education, encourages significant changes in the

organization of the educational process. In particular, the successful formation of information competence of students in such an educational environment is effectively carried out using multimedia technologies [79; 80; 116; 168; 169]. M. Shishkin and M. Popel also state that today in the educational process of a higher education institution it is impossible to do without the use of information and communication technologies, since they significantly affect the receipt of quality education [210, p. 66-67].

It should be noted that the regulatory documents in the field of education also emphasize the need for the active use of modern computer tools and technologies in the educational process. Thus, in 2012, the Presidential Decree "On Urgent Measures to Ensure the Functioning and Development of Education in Ukraine" was issued, which emphasized the need to:

systematic implementation of a set of measures aimed at ensuring the constant modernization of the material, technical, educational and methodological bases of educational institutions;

– paying considerable attention to the effective use in the educational process of interactive teaching methods, information and, in particular, electronic and multimedia teaching aids, the creation of a modern network of information support for the learning process of students [146].

Also, the Law of Ukraine "On the Concept of the National Informatization Program" (ed. 2020) notes that the process and reformation of science, education and culture in the country is aimed at "forming and developing the intellectual potential of the nation, improving the forms and content of the educational process, introducing computer teaching and testing methods" [145], which, in turn, allows to improve the quality of higher education in accordance with world requirements. At the same time, the main of the key tasks of informatization of this area is the creation of a global computer network for this. The clear results of informatization of the education area are presented in this document:

formation of information culture (computer education) in each student;

 ensuring compliance of the content, methods, forms and means of education with the level of world educational standards;

reducing the term of training and improving its quality for future specialists of all specialties;

- search for effective ways to integrate educational, scientific and industrial activities;

- the implementation of constantin the perfection of management of all levels of education;

 solving the issue of staffing in all areas of informatization through timely training of specialists of the relevant profile;

- creation of a system of individual continuous training of students based on the use of "automated training courses and systems, intelligent computer and distance learning technologies" [ibid.].

Clarifying their understanding of the essence of informatization of education, scientists consider it, firstly, as a complex of social neoplasms associated with the rapid filling of educational systems with information technologies and means, and secondly – as a process in the implementation of information means in educational institutions that are based on computer technology, as well as information products, pedagogical technologies, based on these means [42, p. 57]. Therefore, the use of information and computer technologies in the educational environment is aimed at achieving the goal of informatization of education. In addition, we note that in the period of rapid informatization of all social processes, modern students for education, as well as pedagogical and scientific-pedagogical workers of higher education institutions prefer the widespread use of information and communication technologies and, as well as various means of information educational environment.

According to L. Chernenko, in the educational process of a modern higher education institution and, in particular, in the formation of information competence of foreign students, it is advisable to use the following modern information sources:

– information from the Internet;

– various data banks;

- electronic textbooks, reference books, dictionaries and didactic material;

– forums for communication;

- presentations, video materials;

- electronic textbooks and encyclopedias;

- multimedia resources;

programs that automate knowledge control (tests, questionnaires),
 etc. [207, p. 73-75].

The author also emphasizes that teachers, having many opportunities to use the above sources of information, themselves must have information competence to ensure the effective organization of interaction with students. This requires from teacher:

mastering modern strategy and tools of organization of work with educational information;

– possession of the fundamentals of work on a personal computer;

– possession of multimedia information resources and their software;

– possession of the basics of work on the Internet [ibid.].

During the study, the conclusions of scientists (V. Andrievska, R Gurevich, M. Kademia, G. Tkachuk, N. Zhyteneva, V. Kukharenko, L. Shevchenko, etc.) about the change in the role of the teacher in the information and digital society were also taken into account, and as a result – the need to outline the new role and functions of teachers in the educational

information environment of a higher education institution [6; 45; 58; 116; 168; 169; 190].

It is worth noting that in the work of N. Morgunova the classification of information technologies and modern software products that can be effectively used in teaching foreign medical students, in particular in teaching the Ukrainian language, namely the following:

thematic training programs (interactive exercises and diagnostic tools);

- test systems for knowledge control;

– multimedia lecture demonstrations;

- electronic textbooks, textual, graphic, illustrative information, animation, video and audio materials;

- computer educational and methodical complexes, etc. [116, p.563].

As L. Ostapenko emphasizes, the educational environment of higher education institution provides an effective impact on the formation of students' competencies, as it provides them with unlimited opportunities to find the necessary educational information to perform independent work, prepare for seminars, reports, write essays and perform other types of educational activities, and therefore – on the formation of students skills to work with the information, in particular to search, analyze and evaluate the information. However, this will be fully implemented only if the training focuses on an innovative model of education, the most important characteristics of which are the student-centered focus on the educational process, the most important characteristics of which are the student-centered orientation of the educational process, the direction of teachers on development of students' creative abilities [125, p.15].

According to the scientific conclusions of scientists (A. Zabolotna, N. Ilchenko, M. Shishkina, Y. Zaporozhchenko, O. Spirina etc.), the use of information and communication technologies in the educational environment of a higher education institution opens up wide opportunities for all its subjects to

ensure a new quality of education. Among such opportunities the scientists separate the following:

- combination of efficiency and flexibility of the learning process;

 expanding the possibilities of traditional methods and forms of teaching students and creating new, more effective methods and forms of implementation of this process;

- transition from reproductive to creative or advisory activities of participants in educational interaction;

 providing access to all subjects of the educational process to the necessary information related to the planning, organization and monitoring of the course and results of this process;

- ensuring active communicative interaction between subjects;

effective use of educational and methodical complexes for teaching various academic disciplines, in particular in electronic form;

access to remote educational resources online, the best samples of electronic resources and services;

- use of virtual laboratories, laboratory complexes of remote access, interactive whiteboards, computer and presentation equipment, network equipment, cloud computing, virtual and mobile learning [60; 209; 211].

In the process of carrying out a scientific search, the results of D. Horvat's research devoted to the study of the problem of the educational environment of a higher education institution as a factor in the formation of general cultural competencies of students were also useful. As it is proved by the scientist, correctly designed from the pedagogical point of view educational environment promotes effective formation of information competence of students. In this case the university graduates are able to work purposefully with the information in all its forms (oral, written, printed, electronic, etc.), and also have the skills to

effectively use their knowledge to receive, process and transmit information using information computer technologies [202, p. 18].

It is important to note that any knowledge in the field of medicine is not static, that is, it is constantly updated and developed, in particular, new methods of diagnosis and prevention of treatment appear, which is why the flow of medical information is constantly increasing. Therefore, the introduction of information and computer technologies into the educational environment of a higher medical education institution is a logical and necessary step for the successful development of modern medicine and the domestic field of human health care. In view of this, the problem of providing future doctors with ample opportunities to integrate into various societies, self-determination in life, active position, be competitive in the world labor market is significantly actualized, and this is largely facilitated by ensuring the professional and personal development of medical students in the educational environment of the university [29].

As is known, the development of modern society is characterized by growing dynamism, penetration into new levels of knowledge, changes in the social structure and the emergence of qualitatively new activities in those areas that were previously unknown. Therefore, it is of great importance to form the aspirations and ability of future medical professionals to actively identify and explore the novelty of the constantly changing world, to invent new original strategies for behavior and activity. At the same time, we clarify that in educational activities, students reproduce the real process of creating new concepts, images, forms by people, while information activity is realized by performing certain information actions [197].

It is advisable to note that, according to T. Zakusilova, the use of information technologies in the process of training students for higher medical education involves the implementation of various information actions, in particular, the transformation of various kinds of information, archiving a large

amount of information, visualizing information and modeling the objects being studied, automating computational and search activities. In its turn it promotes:

- intensification of the educational process;
- individualization of training of future doctors;
- optimization of the search for the necessary information;
- strengthening the control of the assimilation of the material;

- development of independence, initiative, activity, self-control of students in the learning process;

- development of different types of thinking in them;

 accelerating the receipt by participants of the educational process of the necessary information or statistical data [62, p.148-149].

The analysis of scientific literature on the formation of information competence of students for higher education testifies to the high efficiency of the use of computer technologies in the process of training students, in particular for the formation of information competence in them [28; 29; 31; 42; 80; 100; 155; 180; 187; 209]. In turn, the formed information competence of the future specialist provides him with the opportunity to be successful in the modern information society and reflects the ability of the individual to determine his own information needs and search for information both in the traditional way and with the help of modern means of information technology necessary to realize these needs [139, p. 107].

Studying the problem of organizing the information and communicative competence of foreign students, A. Prikhodko also found out that it is possible to increase the efficiency of this process by using various mobile technologies in the learning process of students, as well as acting as effective auxiliary means of forming information and communicative competence. not only among students, but even among teachers [139, p.107].

It is obvious that the period of forced transition of all higher education institutions of Ukraine from March 2020 to a mixed and subsequently distance learning format due to the COVID-19 pandemic led to the use of new information technologies in the educational environment, increased the need of all its participants to find new approaches to the organization of training, fundamental changes in teaching methods, widespread use of online technologies, reassessment of the role of the teacher in education.

This ensured introduction of fundamentally new requirements for the creation of an educational environment in a higher education institution, organization of students' educational activities based on the use of modern information technologies to fully ensure the formation of professional and socially significant competencies in future specialists. The majority of higher education institutions, in particular medical education, were able to quickly respond to the challenges of today and reorganize the educational process on the basis of widespread use of various information technologies [87, p.5].

In particular, according to the results of A. Prykhodko's research, the use of information and, in particular, mobile technologies in mixed learning of foreign students contributes not only to improving the quality of this process, but also to the effective formation of information and communicative competence among students, and this radically changes (inperfecting) the method of its formation in a foreigner. [139, p.107]. I. Zalipska believes that during the education of foreign medical students it is necessary to actively use computers, video systems, video materials, information board, Internet portals and other computer technologies, because this not only improves the quality of this process, but also helps to reduce the language barrier of the individual, develop its interest and motivation, form its information competence [64, p. 56-57].

O. Ponomarenko also believes that high-quality training of foreign students, in particular language, is impossible without the widespread use of information and telecommunication technologies. mail, etc. According to the results of O. Ponomarenko's research, the use of information technologies in the learning process of foreign students provides:

successful formation of communicative and informational competence in them;

 active development of students' cognitive skills, skills to independently design their knowledge and correctly navigate in the information space;

development of motivation and increase of cognitive activity of foreign students;

- the ability to focus the teacher's attention on significant points of information;

 motivation to intensive participation in the learning process of the student himself, which contributes to increasing the efficiency of perception and memorization of educational material [136, p.104-107].

Scientists and teachers of domestic medical universities (Y. Ambrosimov, M. Vovchenko, M. Voloshyn, M. Dovbysh A. Svitlytsky, A. Chernyavsky, M. Shcherbakov, etc.) also defend the scientific position according to which modern information and digital technologies (3D graphics, 3D anatomage table, 3D Organon Anatomy VR software, virtual reality helmet, etc.) during the study of special disciplines (for example, human anatomy) have considerable advantages comparable to other methods and means of education, since they allow students to effectively immerse themselves in the educational process, and also contribute to the formation of professional and, in particular, information competence in them [31; 161].

As noted in the scientific literature, the use of information technologies in the educational environment of the medical university, in particular those that contribute to the formation of information competence of foreign applicants for medical specialties, has significant advantages compared to many other methods and forms of education, because these technologies provide:

 increasing the amount of useful information with the accumulation of standard solutions and generalizing the experience of scientific developments;

simplification and acceleration of the processes of searching,
 processing, storing, transmitting and presenting educational information by a
 person;

- the possibility of analyzing by the participants of the educational process a large amount of educational information;

ensuring the depth, accuracy and quality of solving problems and problems;

- setting a goal and obtaining results that cannot be obtained by other means, etc. [42; 83].

Thus, implementation of innovative educational technologies in the system of medical education is an extremely relevant direction in the development of domestic health care. The rapid growth of medical knowledge, the need to ensure a high qualification level of medical personnel determine the expediency of using modern information technologies in the educational process, which make it possible to improve the quality of education, to make the process of acquiring knowledge with systematic and highly effective, and also contribute to the formation of information competence among applicants for higher education.

Thus, it can be summed up that the educational environment of the university, competently developed from a pedagogical point of view, contributes to the successful education of foreign students of medical profile and, in particular, the formation of their information competence. In particular, increasing the level of its formation in future medical workers promotes their quicker adaptation in new social-cultural conditions, improving academic

success of international students and their readiness to future professional activity that requires the manifestation of the ability to work quickly and effectively with various amounts of information.

Literature to chapter 3

1. Авачева Т. Г., Кадырова Э. А. Развитие дистанционных образовательных технологий для формирования информационнообразовательной среды в медицинском вузе. *Современные технологии в науке и образовании - СТНО-2018* : сб. тр. междунар. науч.-техн. форума: в 10 т. Т. 9 / под общ. ред. О. В. Миловзорова. Рязань: Рязан. гос. радиотехн. ун-т, 2018; Рязань. С. 18–22.

2. Адаменко О. В. Підготовка іноземних студентів в Україні як об'єкт педагогічних досліджень. *Фахова підготовка іноземних громадян в Україні : сучасний стан та перспективи розвитку*: матеріали Міжнар. наук.-практ. конф. (Київ, 4-6 лютого 2002 року). Київ: Київ. нац. торг.-екон. ун-т., 2002. С. 49–53.

3. Академическая адаптация образовательных мигрантов в стране обучения : монография [под ред. Н. И. Ушаковой]. Харьков : ХНУ им. В. Н. Каразина, 2017. 248 с.

4. Актуальні проблеми навчання іноземних студентів. Матеріали XXIII Всеукраїнської науково-практичної конференції. Дніпро. 2021. 164 с.

5. Алипов Н. Н., Соколов А. В., Сергеева О. В. Контроль знаний в медицинских вузах: проблемы и пути решения. *Медицинское образование* и профессиональное развитие. 2013. № 4. С. 55–63.

6. Андрієвська В. М. Теоретичні і методичні засади підготовки майбутнього вчителя початкової школи до використання іннформаційно-комунікативних технологій у професійній діяльності: дис. ... д-ра пед.

наук : 13.00.04 / Харк. нац. пед. ун-т імені Г. С. Сковороди. Харків, 2019. 432 с.

7. Арсеньев Д. Г., Зинковский А. В., Иванова М. А. Социальнопсихологические и физиологические проблемы адаптации иностранных студентов. СПб.: Изд-во СПбГПУ, 2003. 160 с.

8. Астап'єва О. М. Нові вимоги до вищої освіти в умовах глобалізації та інтеграції навчання. *Український радіологічний та онкологічний журнал.* 2020. Т. 28, № 3. С. 191–328.

9. Бакало Т. М. Педагогічні умови адаптації іноземних студентів до навчання у вищих технічних навчальних закладах: дис. ... канд. пед. наук.: 13.00.04 / Нац. авіаційний ун-т. Київ, 2017. 306 с.

10. Барышникова Н. Г. Педагогическое сопровождение профессиональной подготовки студента иностранца в период обучения в вузе. Барнаул: АГТУ, 1984. 169 с.

11. Басов М. Я. Основы педологии. Москва-Ленинград : ГИЗ, 1928.774 с.URL: http://psyanimajournal.livejournal.com/1597.html (датазвернення: 07.11.2022).

12. Батраева О. М. Практическая работа над языком специальности иностранных студентов, изучающих дисциплину «Профессиональный иностранный язык II» в техническом вузе. *Концепт.* 2015. Т. 27. С. 141–145. URL: <u>http://e-koncept.ru/2015/65529.htm</u>. (дата звернення: 19.11.2022).

13. Белякова Е. Г., Захарова И. Г. Социокультурное информационное пространство образования в контексте проблемы формирования личности. Вестник Тюменского государственного университета. 2010. № 5. С. 11–17.

14. Бережнова Л. Н., Богословский В. И. Сопровождение в образовании как технология разрешения проблем развития. Известия Российского государственного педагогического университета имени А. И. Герцена. 2005. Вып. № 12, т. 5. С. 11.

15. Билык Е. Н. Проблемы социокультурной адаптации иностранных студентов на начальном этапе обучения. Язык u специальность: актуальные проблемы обучения иностраниев в высшем учебном заведении: тез. докл. первой междунар. науч.-метод. конф., (Харьков, 14–16 окт. 2010 г. / Харьк. нац. ун-т радиоэлектроники, Центр обучения иностр. граждан. Харьков, 2010. С. 28–32.

16. Білик О. М. Соціалізація іноземних студентів в освітньокультурному середовищі вищого навчального закладу України: монографія. Харків, 2016. 336 с.

17. Білик О. М. Теорія та методика соціалізації іноземних студентів в освітньо-культурному середовищі вищого навчального закладу: дис. ... дра пед. наук: 13.00.05 «Соціальна педагогіка» / Харків. держ. акад. культури; Держ. закл. «Луган. нац. ун-т імені Тараса Шевченка», Старобільськ, 2018. 683 с.

18. Білоус О. А. Адаптаційні проблеми іноземних студентів інженерного профілю. *Вісник психології і педагогіки*. Київ. 2012. Вип. 7. URL: <u>http://www.psyh.kiev.ua/Збірник_наук._праць._-_Випуск_7</u>. (дата звернення: 07.01.2021).

19. Богуш А., Гавриш Н. Методика ознайомлення дітей з довкіллям у дошкільному навчальному закладі: підруч. для ВНЗ. Київ: Вид. Дім «Слово», 2010. 408 с.

20. Братко М. В. Освітнє середовище вищого навчального закладу: функціональний аспект. *Педагогічний процес: теорія і практика*. 2015. Вип. 1-2. С. 11–18. URL: http://nbuv.gov.ua/UJRN/pptp_2015_1-2_4 (дата звернення: 01.11.2022).

21. Братко М. В. Структура освітнього середовища вищого навчального закладу. *Наукові записки [Кіровоградського державного педагогічного університету імені Володимира Винниченка]*. Серія: Педагогічні науки. Кіровоград, 2015. Вип. 135. С. 67–72.

22. Буракова К. В. Аналіз вагомих складових соціальної адаптації іноземних студентів до навчання у вищих навчальних закладах України на початковому етапі. *Педагогічні науки*. 2010. № 7. ч. 1. С. 48–55.

23. Буракова К. В. Виявлення педагогічних умов, що сприяють процесу адаптації іноземних студентів в умовах збереження їхньої культурної ідентифікації. *Педагогічні науки*. 2012. № 7. С. 230–235.

24. Валеева Д. Р., Спиридонова Л. Н. Особенности кураторской деятельности для успешной адаптации иностранных учащихся. *Science for education today.* 2020. № 10. Т. 2. С. 22–36.

25. Ващенко Л. Інноваційне середовище післядипломної педагогічної освіти. *Післядипломна освіта*. 2012. № 1. С. 37–40.

26. Великий тлумачний словник сучасної української мови (з дод. і допов.) / [уклад., голов. ред. В. Т. Бусел]. Київ, Ірпінь: ВТФ «Перун», 2005.
 1728 с.

27. Веселовська Н., Литвин I. Використання сучасних технологій дистанційного навчання на заняттях з української мови як іноземної. *Актуальні питання організації навчання іноземних студентів в Україні*: матеріали V Міжнар. наук.-метод. конф. (14-16 жовтня 2020 р.). Тернопіль, 2020. С. 43–47.

28. Використання дистанційних методів навчання в медичній освіті / І. М. Скрипник, Г. С. Маслова, Н. П. Приходько [та ін.]. *Проблеми безперервної медичної освіти та науки*. 2020. № 3. С. 29–32.

29. Використання інформаційних технологій у навчанні лікарів на етапі післядипломної освіти / В. А. Потабашній [та ін.]. *Гастроентерологія*. 2017. № 4. С. 82–85. URL: http://www.mif-ua.com/archive/article/45437 (дата звернення: 01.10.2022).

30. Волошан М. М., Волошан Г. А. Адаптація іноземних здобувачів до української інформаційної культури. *Інноваційні ініціативи організації* навчання іноземних здобувачів вищої освіти: тези доповідей [Інтернет] (2020 квітень; Харків). Харків, 2020. С. 32–35.

31. Волошин М. А., Щербаков М. С., Довбиш М. А. Перспективи використання інформаційних технологій в навчальному процесі на кафедрах морфологічного та хірургічного профілю. *Актуальні питання фармацевтичної та медичної науки та практики*: зб. наук. ст. Запоріжжя : Вид-во ЗДМУ, 2007. Вип. XVIII. С. 257–258.

32. Габа І. М. Вплив освітнього середовища ВНЗ на професійний розвиток особистості. *Проблеми загальної та педагогічної психології*: зб. наук. праць. Ін-ту психології імені Г. С. Костюка АПН України. Київ, 2011. Т. XIII, ч. 6. С. 74–82.

33. Гетманюк І. Б., Крамар С. Б., Небесна З. М., Шутурма О. Я. Переваги і недоліки дистанційного навчання в цілому та при вивченні дисципліни «Гістологія, цитологія, ембріологія». *Медична освіта*. 2020. № 4. С. 16–19.

34. Гладир Я. Проблема допрофесійної підготовки іноземних студентів у сучасній педагогічній науці. *Аналітичний огляд педагогіка* вищої та середної школи. 2015. Вип. 44. С. 315–322.

35. Глебова Т. А. Профессиональная языковая подготовка студентов-иностранцев в поликультурной среде вуза. Вестник МГИМО-Университета. 2014. № 4. С. 317–323. Глыбочко П. В. Обеспечение инновационного характера непрерывного медицинского образования качественно нового уровня. Медицинское образование и вузовская наука. 2012. № 2(2). С. 6–9.

36. Головко В. А. Педагогічний супровід професійного самовиховання іноземних студентів у вищих технічних навчальних закладах: дис. ... канд. пед. наук: 13.00.07. Харків, 2015. С. 89.

37. Горбунова Н. В. Информационно-образовательная среда вуза как средство формирования информационной компетентности студентов.

Вестник Ишимского государственного педагогического института имени П. П. Ершова. 2012. № 6. С. 50–54.

38. Гребенникова И. А. Педагогическое сопровождение адаптации иностранных студентов в российском вузе (на примере китайских студентов): автореф. дис. ... канд. пед. наук :13.00.08. Комсомольск-на-Амуре, 2010. 21 с.

39. Гребенюк О. С., Гребенюк Т. Б. Теория обучения. Москва: Владос-Пресс, 2003. С. 23–30.

40. Гребнев Л. С. Высшая школа в новом законе «Об образовании: хотим как лучше?». *Высшее образование в России*. 2011. № 1. С. 13–25.

41. Грибан О. Н. Формирование информационной компетентности студентов педагогического вуза : монография; ФГБОУ ВПО «Урал. гос. пед. ун-т». Екатеринбург, 2015. 162 с.

42. Гришкова Р. О. Педагогічні засади формування іншомовної соціокультурної компетенції студентів нефілологічних спеціальностей у процесі фахової підготовки: автореф. ... дис. д-ра пед. наук: 13.00.04. Київ, 2007. 38 с.

43. Гришкова Р. О. Реалізація оновленого змісту англомовної підготовки студентів нефілологічних спеціальностей в умовах сьогодення. Наукові праці Чорноморського державного університету імені Петра Могили комплексу "Києво-Могилянська академія". Сер.: Педагогіка. 2010. Т. 123. Вип. 110. С. 94–98.

44. Гуревич Р. С., Кадемія М. Ю., Шевченко Л. С. Інформаційні технології навчання: інноваційний підхід: навч. посіб / за ред.
Р. С. Гуревича. Вінниця: ТОВ фірма «Планер», 2012. 348 с.

45. Гущина Т. Н. Педагогическая сущность феномена «образовательная среда»: по материалам исследования. Общество. Среда. Развитие (Terra Humana). 2011. № 4. С. 187–190.

46. Давидова Ж. В. Акультурація іноземних студентів у процесі міжкультурної взаємодії. *Materiály XI mezinárodní vědecko – praktická konference «Věda a technologie: krok do budoucnosti. 2015»*. Praha. Publishing House «Education and Science», 2015. Díl 8. Pedagogika. C. 61–63.

47. Давидова Ж. В. Самовиховання як чинник адаптації іноземних студентів у соціокультурному середовищі ВНЗ України. *Науковий вісник Південноукраїнського національного педагогічного університету імені* К. Д. Ушинського. 2015. Вип. 1. С. 134–139.

48. Демидов Н. И. Анализ подходов понятию «образовательная среда» в научной мысли XX века. *Известия Саратовского университета*. Серия: Психология. Педагогика. 2009. Вып. 4. С. 113–116.

49. Деякі питання організації набору та навчання (стажування) іноземців та осіб без громадянства: Наказ МОН України від 01.11.2013 р. № 1541: станом на 18 черв. 2021 р. URL: https://zakon.rada.gov.ua /laws/show/z2004-13#Text (дата звернення: 07.11.2022).

50. Добрынина О. А. Психолого-педагогическое сопровождение развития учащихся: учеб.-метод. комплект. Новокузнецк: Изд-во ИПК, 2002.

51. Драгнєв Ю. В. Інформаційно-навчальне середовище як чинник професійного розвитку майбутнього вчителя фізичної культури в умовах інформаційно-освітнього простору. *Педагогіка і психологія професійної освіти.* 2011. № 1. С. 94–99.

52. Ехалов В. В., Святенко Т. В., Хоботова Н. В. Педагогические приёмы оптимизации восприятия лекционного материала. Дерматовенерология и эстетическая медицина. 2015. № 3 (27). С. 28–34.

53. Євроосвіта. URL: http://www.euroosvita.net/index.php (дата звернення: 02.11.2021).

54. Єжова О. О. Формування ціннісного ставлення до здоров'я учнів професійно-технічних навчальних закладів: монографія. Суми: Видво «МакДен», 2011. 412 с.

55. Ждан В. М., Дворник В. М., Старченко І. І., Бєляєва О. М. Політика у сфері якості та функціонування внутрішньої системи якості освіти в Українській медичній стоматологічній академії. *Актуальні проблеми сучасної вищої медичної освіти в Україні*: матеріали навч.-наук. конф. з міжнар. участю (21 березня 2019 р., м. Полтава). Полтава, 2019. С. 3–5.

56. Желанова В. В. Середовищний підхід у вищій освіті: сутність та логіка реалізації. *Теорія і практика професійної майстерності в умовах ціложиттєвого навчання*: монографія / за ред. О. А. Дубасенюк. Житомир: Рута, 2018. С. 98–115.

57. Житєньова Н. В. Теоретичні і методичні засади професійної підготовки майбутніх учителів природничо-математичних дисциплін до використання технології візуалізації в освітньому процесі: дис. ... д-ра пед. наук: 13.00.04 / Харків. нац. пед. ун-т імені Г. С. Сковороди. Харків, 2020. 538 с.

58. Журтова А. З., Унежева М. К., Шериева Е. М. Роль кураторов в адаптации иностранных студентов. *Вестник педагогических наук*. 2021. № 3. С. 7–10.

59. Заболотна А. Г., Ільченко Н. В. Інформаційне освітнє середовище як складова підготовки кваліфікованих фахівців. Формування сучасного освітнього середовища: теорія і практика: матеріали Міжвуз. наук.-практ. конф.: зб. наук. пр. Ірпінь, 2020. С. 5–8.

60. Закусилова Т. О. Управління розвитком педагогічної майстерності викладачів-клініцистів закладу вищої медичної освіти. Chapter «Pedagogical sciences». C. 163–185. URL: http://dspace.zsmu.edu.ua /bitstream/123456789/15675/1/Zakusilova%20T.%20The%20management%20

development%20of%20pedagogical%20skills%20of%20teachersclinicists%20of%20the%20higher%20medical%20education%20institution.pdf (дата звернення: 01.10.2022).

61. Закусилова Т. О. Формування основ професіоналізму майбутніх медичних сестер у процесі фахової підготовки: дис. ... канд. пед. наук 13.00.04 / Класичний приватний університет. Запоріжжя, 2018. 318 с.

62. Закусилова Т. О., Різник О. І. Методичний супровід моделювання освітнього середовища для професійної підготовки іноземних студентів у закладах вищої медичної освіти України. *Інноваційні ініціативи організації навчання іноземних здобувачів вищої освіти*: матеріали Міжнар. наук.-практ. конф. Харків: Вид-во ХНУМГ імені О. М. Бекетова, 2020. С. 52–55.

63. Заліпська І. Я. Застосування інтерактивної дошки під час вивчення української мови іноземними студентами медичних спеціальностей. *Інноваційні ініціативи організації навчання іноземних* здобувачів вищої освіти: матеріали Міжнар. наук.-практ. конф. Харків: Вид-во ХНУМГ імені О. М. Бекетова, 2020. С. 56–57.

64. Заредінова Е. Р. Освітнє середовище вищого навчального закладу: наукові підходи трактування структури. Вісник Національного авіаційного університету. Серія «Педагогіка. Психологія». 2017. Вип. 2 (11). С. 54–58.

65. Заредінова Е. Р. Теоретичні і методичні засади формування соціокультурних цінностей студентів в освітньому середовищі вищого навчального закладу: дис. ... д-ра пед. наук: 13.00.07. Київ, 2020. 564 с.

66. Иванова С. В. Образовательное пространство и образовательная среда: в поисках отличий. *Ценности и смыслы*. 2015. № 6 (40) С. 23–28.

67. Ильина Т. А. Педагогика: курс лекций: учеб. пособие для пед. ин-тов. Москва: Просвещение, 1984. 496 с.

68. Использование платформ обучения электронного для внеаудиторной самостоятельной работой студентов управления В университетах / Э. Ф. Баринов [и др.]. медицинских Непрерывное век. 2015. Вып. 3 (11). C. 114–126. образование: XXI URL: https://doi.org/10.15393/j5.art.2015.2930 (дата звернення: 07.11.2022).

69. Іноземні студенти в Україні – навчання в Україні. *Навчання в Україні – Ukrainian State Center for International Education /* М-во освіти і науки України; Український держ. центр міжнар. освіти. URL: <u>https://studyinukraine.gov.ua/zhittya-v-ukraini/inozemni-studenti-v-ukraini/</u> (дата звернення: 06.11.2021).

70. Інформаційно-освітнє середовище професійно-технічних навчальних закладів: посібник / Л. А. Карташова [та ін.]; за наук. ред. П. Г. Лузана. Київ : ІПТО НАПН, 2017. 124 с.

71. Кабацька О. В. Система формування здоров'язбережувального освітнього середовища в класичних університетах: історія, теорія, практика: дис. ... д-ра пед. наук: 13.00.07 / ХНПУ імені Г. С. Сковороди, Луганський нац. ун-т імені Тараса Шевченка. Харків, 2020. 553 с.

72. Кабацька О. В. Формування здоров'язбережувального освітнього середовища в класичних університетах: історія, теорія, практика: монографія. Харків : СГ НТМ «Новий курс», 2020. 382 с.

73. Кадырова Э. А. Организация самостоятельной работы студентов в системе дистанционного обучения РГРТУ. *Ученые записки Института гуманитарных и социальных знаний*: материалы V междунар. науч.-практ. конф. "Электронная Казань-2013" (ИКТ в образовании: технологические, методические и организационные аспекты их использования). Казань: ЮНИВЕРСУМ, 2013. Вып. 1 (11) Ч. 2. С. 79–83.

74. Каленик О. О., Цареградська Т. Л., Тарасова Т. В. Методичні аспекти оптимізації процесу навчання студентів-іноземців на підготовчих

відділеннях ВНЗ України. Вісник університету Альфреда Нобеля. Серія «Педагогіка та психологія». Педагогічні науки. 2017. № 1 (13). С.194–199.

75. Каташов А. Педагогічні основи розвитку інноваційного освітнього середовища сучасного ліцею: автореф. дис. ... канд. пед. наук; 13.00.01 / Луганський держ. пед. ун-т імені Тараса Шевченка. Луганськ, 2001. 20 с.

76. Киящук Т. В. Теоретические и практические аспекты социально-психологического сопровождения иностранных студентов в учебной деятельности : учеб. пособие. Москва : Изд-во РУДН, 2009. 88 с.

77. Ковалев Г. А. Психическое развитие ребенка и жизненная среда. Вопросы психологии. 1993. № 1. С. 13–23.

78. Когут I. В. Теоретичні основи розвитку професійно-педагогічної комунікації в умовах сучасного інформаційного суспільства. *Materialy VIII Miçdzynarodawej naukowi-praktycznej konferencji «Nauka: teoria i praktyka* 2012». Przemysl : Nauka i studia, 2012. VoL 5: Pedagogiczne nauki. S. 68–73.

79. Когут І. В., Литовка В. В. Формування інформаційної компетентності учасників освітнього Психологічні середовища. координати розвитку особистості: реалії та перспективи: зб. наук. IV Міжнар. матеріалів наук.-практ. конф. до 105-річчя ПНПУ ім. В. Г. Короленка і 100-річчя фіз.-мат. ф-ту (22 травня 2019 р. м. Полтава). Полтава Шевченко P. B., 2019. C. 92–94. URL: https://core.ac.uk/download /pdf/211228847.pdf (дата звернення: 01.11.2022).

80. Козулина А. П. Готовность преподавателей российских вузов к подготовке иностранных студентов: критерии и способы оценивания. *Науковедение*. 2014. Т. 6, № 6. URL: https://doi.org/10.15862/54pvn614 (дата звернення: 07.11.2022).

81. Компетентнісний підхід у медичній освіті: метод. посіб. / А. Мигаль [та ін.]. Київ, 2021. 80 с. URL: <u>https://mededu.org.ua/wp-content/themes/metheme/assets/pdf/lib6.pdf</u> (дата звернення: 07.04.2021).

82. Компьютерные технологии в науке и образовании: метод. указания к практ. занятиям / сост. В. Н. Арефьев. Ульяновск : УлГТУ, 2001. 42 с.

83. Кононец Н. В. Роль інформаційно-освітнього середовища закладу вищої освіти при ресурсно-орієнтованому навчанні студентів у вищій школі. *Засоби навчальної та науково-дослідної роботи*. 2018. Вип. 51. С. 31–45.

84. Кононова Т. О. Аналіз проблеми професійної підготовки іноземних студентів у ВНЗ України. *Проблеми інженерно-педагогічної освіти*. Харків, 2013. Вип. 38–39. С. 252–258.

85. Концептуально-референтна Рамка цифрової компетентності педагогічних й науково-педагогічних працівників. Проєкт. 2021 URL: https://osvita.diia.gov.ua/uploads/0/2629-frame_pedagogical.pdf (дата звернення: 07.11.2022).

86. Корда М. М., Шульгай А. Г., Машталір А. І., Чорномидз А. В. Дистанційне навчання – вимушений захід чи вимога часу (на прикладі тернопільського національного медичного університету імені І. Я. Горбачевського МОЗ України). *Актуальні питання вищої медичної (фармацевтичної) освіти: виклики сьогодення та перспективи їх вирішення*: матеріали XVIII Всеукр. наук.-практ. конф. в онлайн-режимі за допомогою системи microsoft teams (Тернопіль, 20–21 трав. 2021 р.) / Терноп. нац. мед. ун-т імені І. Я. Горбачевського МОЗ України. Тернопіль: ТНМУ, 2021. С. 3–13.

87. Коренєва І. В., Панченко В. Г., Клименко Т. М. Особливості використання дистанційного навчання для підготовки іноземних студентів до навчання у ВНЗ України. *Проблеми сучасної освіти*: зб. наук.-метод.

праць / ХНУ імені В. Н. Каразіна. Харків, 2018. Вип. 8, ч. 2. С. 48–51. URL: https://periodicals.karazin.ua/issuesedu/article/view/10868 (дата звернення: 12.10.2022).

Проблемы 88. Корощенко А. В., Асмоах Дж. И особенности иностранных студентов английском обучения на языке. URL: http://ea.donntu.edu.ua/bitstream/123456789/21739/1/%D0%9F%D0%A 0%D0%9E%D0%91%D0%9B%D0%95%D0%9C%D0%AB%20%D0%98%20 %D0%9E%D0%A1%D0%9E%D0%91%D0%95%D0%9D%D0%9D%D0%9E %D0%A1%D0%A2%D0%98%20%D0%9E%D0%91%D0%A3%D0%A7%D0 %95%D0%9D%D0%98%D0%AF.pdf (дата звернення: 01.05.2021).

89. Костенко Д. В., Чернуха Н. М. Формування міжкультурної компетентності у студентів галузі ІТ в освітньому середовищі вісник Донбасу. 2019. C. 39–40. університету. Науковий № 1–2. URL: http://nvd.luguniv.edu.ua/archiv/2019/N1-2(39-40)/kvdosu.PDF (дата звернення: 07.11.2022).

90. Котовська І. Питання адаптації іноземних студентів до навчання у вищих закладах України. Актуальні питання організації навчання іноземних студентів в європейському освітньому просторі: матеріали міжнар. наук.-метод. конф. (м. Тернопіль, 13-16 травня 2014). Тернопіль, 2014. С. 133–135.

91. Кремінський Б. Г. Функції освітнього середовища з точки зору створення умов для роботи з обдарованою молоддю. *Науковий часопис Національного педагогічного університету імені М. П. Драгоманова*. Серія 5: Педагогічні науки: реалії та перспективи. 2016. Вип. 53. С. 102– 108.

92. Крицький I. О. Шляхи підвищення якості навчання іноземних студентів вищого медичного навчального закладу. *Медична освіта*. 2019. № 2. С. 19–23.

93. Кузнецова Г. А., Якунин А. В. Выравнивающий дистанционный курс математики для слушателей-иностранцев. *Проблеми сучасної освіти*:
зб. наук.-метод. праць / ХНУ імені В. Н. Каразіна. Харків, 2018. Вип. 8, ч. 2 С. 52–59. URL: https://periodicals.karazin.ua/issuesedu/article/view/10869 (дата звернення: 12.10.2022).

94. Кулюткин Ю., Тарасов С. Образовательная среда и развитие личности. *Новые знания*. 2001. № 1. С. 6–7.

95. Курмунгулов А. А., Фролова О. И., Соловьева С. В. Перспективы внедрения электронного обучения в образовательный процесс медицинского вуза. Высшее образование в России. 2017. № 8/9. С. 116–119.

96. Кучіна В. С. Принципи інтерактивного навчання іноземних мов та їх відповідність вимогам кредитно-модульної системи освіти у ВНЗ України. *Актуальні проблеми навчання і виховання людей з особливими потребами*. 2010. №7 (9). С. 156–165. URL: <u>http://ap.uu.edu.ua/article/276</u> (дата звернення: 07.10.2021).

97. Лаптєва В. Особливості інформативної підготовки іноземних студентів із країн СНД у вищих педагогічних навчальних закладах України. *Інформатика та системні науки (ICH-2015)*: матеріали VI Всеукр. наук. -практ. конф. за міжнар. участю (Полтава, 19–21 березня 2015 року). URL: http://dspace.puet.edu.ua/bitstream/ 123456789/2388/1/96 Лаптева.pdf (дата звернення: 17.12.2022).

98. Лісецька І. С. Дистанційна форма навчання студентів-медиків як виклик сьогодення. *Сучасна педіатрія*. *Україна*. 2020. № 7(111). С. 81–86. URL: https://doi.org/10.15574/sp.2020.111.81 (дата звернення: 08.11.2022).

99. Лобач Н. В. Формування інформаційно-аналітичної компетентності майбутніх лікарів в освітньому середовищі вищого медичного навчального закладу: дис. ... канд. пед. наук. 13.00.04 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2016. 234 с.

100. Лукацька Я. С. Особливості навчання іноземних студентів у закладах вищої освіти України. Вісник університету Альфреда Нобеля. Серія «Педагогіка та психологія». Педагогічні науки. 2020. Т. 1, № 19. С. 211–218. URL: https://doi.org/10.32342/2522-4115-2020-1-19-25 (дата звернення: 07.11.2022).

101. Мазитова Л. Т. Социальная адаптация иностранных студентов: на примере вузов Башкортостана: дис. ... канд. соц. наук: 22.00.04. Уфа, 2002. 154 с.

102. Максимчук Е. Д. Социально-психологическое сопровождение межкультурной адаптации иностранных студентов. Вестник Томского государственного педагогического университета (TSPU Bulletin). 2015. № 11. С. 87–92.

103. Мамонтова Э. Дидактические особенности развития образовательной среды вуза в процессе подготовки специалиста: автореф. дис. ... канд. пед. наук; 13.00.01. Владикавказ, 2007. 20 с.

104. Мануйлов Ю. С. Средовой подход в воспитании: дис. ... д-ра пед. наук : 13.00.01. Москва, 1997. 193 с.

105. Маракушин Д. І., Сирова Г. О., Чаленко Н. М. Адаптація іноземних студентів 1 курсу ХНМУ в умовах дистанційного навчання. *Інноваційні технології навчання: досвід впровадження та перспективи розвитку:* матеріали LIV навч.-метод. конф. ХНМУ (м. Харків, 17 березня 2021 р.). Харків, 2021. Вип. 11. С. 94–105.

106. Маркович Д. Ж., Жуков В. И., Бганба-Церера В. Р. Социальная экология: учеб. пособие. Москва: Союз, 1998. 339 с.

107. Марковський В. Д., Маракушин Д. І., Сінайко В. М., Васильєва О. В. Підготовка здобувачів іноземних вишої освіти Харківському англійською мовою В Національному медичному університеті: сучасний стан та перспективи навчання. Актуальні проблеми

вищої медичної освіти і науки: матеріали Всеукр. наук.-практ. конф. з міжнар. участю (м. Харків, 8 квітня 2021 р.). Харків, 2021. С. 130–133.

108. Марченко О. Г. Теоретичні і методичні засади формування освітнього середовища у вищих військових навчальних закладах авіаційного профілю: дис. ... д-ра пед. наук : 13.00.04. Харків, 2020. 553 с.

109. Медицина / авт.-упоряд. В. М. Скляренко, Т. В. Іовлева, О. Ю. Очкурова; худож.-оформл. Л.Д. Киркач-Осіпова. Харків: Фоліо, 2009. 315 с.

110. Медицина / [кол. автор; под ред. Б. В. Петровского. БМЭ. 3-е изд. Москва: Сов. Энциклопедия, 1980. Т. 14. 496 с.

111. Мельникова I. Ю., Романцов М. Г. Особливості медичної освіти та роль викладача ВНЗ в освітньому процесі на сучасному етапі. Міжнародний журнал експериментальної освіти. 2013. № 11–12. С. 47– 52.

112. Мельничук І. М., Яцишина О. В. Особливості професійної підготовки іноземних студентів вищих медичних навчальних закладів. Науковий вісник Ужгородського національного університету. 2013. Вип. 27. С. 119–121.

113. Методичні рекомендації щодо розроблення стандартів вищої освіти. Затверджені Наказом Міністерства освіти і науки України від 01.06.2017 р. № 600 (у редакції наказу Міністерства освіти і науки України від 30.04.2020 р. № 584. URL: https://mon.gov.ua/storage/app/media/vyshcha /naukovo-metodychna_rada/2020-metod-rekomendacziyi.docx (дата звернення: 07.11.2022).

114. Мокрогуз О. П. Роль мультимедійних засобів у формуванні інформаційної компетентності. Харків: Вид. група «Основа», 2017. 95

115. Моргунова Н. С. Використання можливостей інтерактивної дошки у процесі мовної підготовки іноземних студентів технічних ВНЗ.

Педагогіка формування творчої особистості у вищій і загальноосвітній школах. 2015. Вип.42 (95). С. 562-568

116. Національна рамка кваліфікацій, 2011. URL:http://zakon4.rada.gov.ua/laws/show/1341-2011-п (дата звернення: 07.11.2022).

117. Національний класифікатор України: Класифікатор професій ДК 003:2010. URL: <u>https://zakon.rada.gov.ua/rada/show/va327609-10</u> (дата звернення: 07.11.2022).

118. Нові функції і задачі викладача сучасної вищої медичної школи у підготовці кваліфікованого спеціаліста / О. М. Денисюк [та ін.]. Вісник Вінницького національного медичного університету. 2019, Т. 23, № 2. С. 283–286 URL: https://doi.org/10.31393/reports-vnmedical-2019-23(2)-18 (дата звернення: 08.10.2021).

119. Новые педагогические и информационные технологии в системе образования / под ред. Е. С. Полат. Москва: Академия, 2005. С. 3–17.

120. Овчинникова М. Інформаційно-освітнє середовище як фактор підвищення кваліфікації вчителя: теоретичний аспект. *Нова пед. думка*. 2010. № 2. С. 87–90.

121. Ожегов С. И. Толковый словарь русского языка / [С. И. Ожегов, Н. Ю. Шведова; РАН, Ин-т рус. языка им. В. В. Виноградова]. 4-е изд., доп. Москва: Азбуковник, 1997. 944 с.

122. Особенности обучения иностранных учащихся на предвузовском этапе: педагогические аспекты адаптации / Ю. Л. Березняк [и др.] Международный журнал прикладных и фундаментальных исследований. 2015. № 5–4. С. 666–670.

123. Особливості навчання іноземних студентів у вищих навчальних закладах України / М. О. Дудченко [та ін.]. *Світ медицини та біології*. URL: <u>https://cyberleninka.ru/article/n/osoblivosti-navchannya-inozemnih-</u>
<u>studentiv-u-vischih-navchalnih-zakladah-ukrayini/viewer</u> (дата звернення: 07.10.2021).

124. Остапенко Л. М. Освітнє середовище як впливовий чинник успішної самореалізації здобувача освіти. *Формування сучасного освітнього середовища: теорія і практика*: матеріали Міжвуз. наук.практ. конф.: зб. наук. праць. Ірпінь. 2020. С. 13–15.

125. Палка О. В. Підготовка іноземних студентів вищих навчальних закладів України технічного профілю до вивчення професійної лексики: автореф. ... дис. канд. пед. наук : 13.00.04. Київ, 2003. 18 с.

126. Панов В. И. Психодидактика образовательных систем. СПб.: Питер, 2006. 352 с.

127. Пассов Е. И. Некоторые аспекты проблемы переноса речевых навыков и обучение иноязычной речи. *Психологические основы обучения неродному языку* : хрестоматия / сост. А. А. Леонтьев. Москва; Воронеж, 2004. С. 204–212.

128. Перелік галузей знань і спеціальностей, за якими здійснюється підготовка здобувачів вищої освіти 2015. URL:<u>http://zakon4.rada.gov.ua</u>/<u>laws/show/266-2015-п</u> (дата звернення: 07.11.2022).

129. Петрова Л. И., Кутергина Л. Н. Роль Болонской декларации в организации образовательного процесса в вузе. *Методическое обеспечение Болонского процесса в вузе (педагогический аспект)*. Ростов н/Д : Феникс, 2008. С. 7–17.

130. Петровский А. В. Личность в психологии: парадигма субъектности. Ростов н/Д : Феникс, 1996. 512 с.

131. Плинокос Д. Особливості здійснення експорту освітніх послуг в Україні. *Актуальні питання організації навчання іноземних студентів в Україні*: матеріали V Міжнар. наук.-метод. конф. (14-16 жовтня 2020 р.). Тернопіль, 2020. С. 14–17.

132. Повідомлення від Європейської Комісії: Відкриваючи освіту: Інноваційне викладання та навчання для всіх за допомогою нових технологій та відкритих освітніх ресурсів, СОМ (2013) 654 final, URL: <u>http://ec.europa.eu/education/news/doc/openingcom_en.pdf</u> (дата звернення: 07.10.2021).

133. Полякова Г. Вплив освітнього середовища ВНЗ на формування професійної компетентності фахівця. *Вища школа*. 2010. № 10. С. 78–87.

134. Поляковська О. Тенденції впливу COVID-19 на контингент іноземних студентів Криворізького національного університету. *Актуальні питання організації навчання іноземних студентів в*: матеріали V Міжнар. наук.-метод. конф. (14-16 жовтня 2020 р.). Тернопіль, 2020. С. 9–11.

135. Пономаренко О. Г. Методи і технології викладання мов у ЗВО для іноземних здобувачів. *Інноваційні ініціативи організації навчання іноземних здобувачів вищої освіти* : матеріали Міжнар. наук.-практ. конф. Харків : Вид-во ХНУМГ імені О. М. Бекетова, 2020. С. 104–107.

136. Попков В. А., Коржуев А. В. Дидактика высшей школы. Москва: Академия, 2008. С. 131–140.

137. Порох Д. О. До проблеми адаптації студентів до навчання у вищому навчальному закладі. *Вісник ЛНУ імені Тараса Шевченка*. 2010. №10 (197). Ч. І. С.42–48.

138. Приходько А. М. Формування комунікативної компетентності іноземних студентів засобами мобільних технологій. *Педагогічні науки*. 2016. Вип. LXXIII, т. 2. С. 104–108.

139. Про вдосконалення вищої освіти в Україні : Указ Президента України від 03.06.2020 р. № 210/2020. URL: https://zakon.rada.gov.ua /laws/show/210/2020#Text.

140. Про вищу освіту : Закон України від 01.07.2014 р. № 1556-VII : станом на 27 жовт. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/1556-18#Text (дата звернення: 07.11.2022).

141. Про затвердження плану заходів щодо популяризації можливостей здобуття вищої освіти в Україні для іноземних студентів до 2025 року : Розпорядж. Каб. Міністрів України від 21.04.2021 р. № 350-р. URL: https://zakon.rada.gov.ua/laws/show/350-2021-р#Text (дата звернення: 16.12.2021).

142. Про затвердження Положення про організацію освітнього процесу у закладах охорони здоров'я за участю науково-педагогічних працівників закладів вищої освіти, що здійснюють підготовку здобувачів вищої освіти у сфері охорони здоров'я: Постанова Каб. Міністрів України від 28.12.2020 р. № 1337. URL: https://zakon.rada.gov.ua/laws/show/1337-2020-п#Text (дата звернення: 07.11.2022).

143. Про навчання іноземних громадян в Україні : Постанова Каб. Міністрів України від 26.02.1993 р. № 136: станом на 20 верес. 2018 р. URL: https://zakon.rada.gov.ua/laws/show/136-93-п#Text (дата звернення: 10.11.2022).

144. Про Національну програму інформатизації : Закон України від 04.02.1998 р. № 74/98-ВР : станом на 1 січ. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/74/98-вр#Text (дата звернення: 08.11.2021).

145. Про невідкладні заходи щодо забезпечення функціонування та розвитку освіти в Україні : Указ Президента України від 04.07.2005 р. №1013/2005. URL: https://zakon.rada.gov.ua/laws/show/1013/2005#Text (дата звернення: 08.11.2021).

146. Про освіту: Закон України від 05.09.2017 р. № 2145-VIII : станом на 27 жовт. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/2145-19#Text (дата звернення: 07.11.2022). (дата звернення: 07.11.2022).

147. Про правовий статус іноземців та осіб без громадянства: Закон України від 22.09.2011 р. № 3773-VI: станом на 15 жовт. 2022 р.

URL: https://zakon.rada.gov.ua/laws/show/3773-17#Text (дата звернення: 07.11.2022).

148. Про схвалення Стратегії розвитку медичної освіти в Україні: Розпорядж. Каб. Міністрів України від 27.02.2019 р. № 95-р. URL: https://zakon.rada.gov.ua/laws/show/95-2019-р#Text (дата звернення: 07.11.2022).

149. Проєкт «Розвиток медичної освіти в Україні»: пріоритети на 2020 рік URL: https://moz.gov.ua/article/news/proekt-rozvitok-medichnoi-osviti-v-ukraini-prioriteti-na-2020-rik (дата звернення: 07.11.2022).

150. Рагріна Ж. М. Підготовка майбутніх іноземних спеціалістівмедиків до професійного спілкування: дис. ... канд. пед. наук. 13.00.04. Теорія та методика професійної освіти. Запорізький національний університет. Запоріжжя. 2017. 298 с.

151. Розвиток практично-орієнтованого та симуляційного навчання в Тернопільському державному медичному університеті імені І. Я. Горбачевського / М. М. Корда [та ін.]. *Актуальні питання якості медичної освіти* : матеріали XIII Всеукр. наук.-практ. конф. з міжнар. участю (Тернопіль, 12–13 трав. 2016 р.) : у 2-х т. Тернопіль : ТДМУ, 2016. Т. 1. С. 41–43.

152. Романова Т. А., Виндижева М. К., Сабанова Р. К., Мамаева Ж. М. Особенности обучения иностранных студентов на подготовительных факультетах. *Педагогический журнал.* 2018. Т. 8. № 5А. С. 559–567.

153. Романцов М. Г., Мельникова І. Ю. Современные образовательные технологии – средство инновационного пути развития высшего медицинского образования. *Мед. образование и проф. развитие*. 2015. № 1. С. 88–95.

154. Свиридюк В. В. Формування інформаційно-комунікативної компетентності майбутніх магістрів медсестринства на засадах

технологічного підходу: дис. ... канд. пед. наук: 13.00.04 / Житомир. держ. ун-т імені Івана Франка. Житомир, 2018. 347 с.

155. Сегеда О. О., Осипенко А. А. Особливості адаптації іноземних студентів до освітнього середовища України. *Психологія*. Харків, 2014. Вип. 48. С. 205–208.

156. Семененко І. Є. Особливості фахової підготовки іноземних студентів вищих технічних навчальних закладів. *Педагогічний процес: теорія і практика*. 2014. Вип. 2. С. 33–36.

157. Семененко І. Є. Технологія педагогічного супроводу у процесі фахової підготовки іноземних студентів в умовах вищого технічного навчального закладу. *Педагогіка та психологія*. 2013. Вип. 44. С. 111–117.

158. Сериков В. В. Личностно-развивающая образовательная среда как ресурс подготовки педагога. Обсуждение проблемных вопросов теории средового подхода как методологии опосредованного управления в образовании, социальных процессах, обмен практическим опытом и обучение педагогическим приемам в логике средового подхода. URL: <u>http://www.vspc34.ru/index.php?option=com_content&view=article&id= 127 (дата звернення: 07.11.2022)</u>.

159. Сериков В. В. Парадигма современного образования: ориентация на личность. *Научно-педагогические школы Юга России: теория и история развития* URL: http://www.rspu.edu.ru/university /publish/schools/2/1.html (дата звернення: 07.11.2022).

160. Симуляційне навчання при вивченні анатомії людини / Ю. Ю. Абросімов [та ін.]. *Актуальні питання вищої медичної (фармацевтичної) освіти: виклики сьогодення та перспективи їх вирішення*: матер. XVIII Всеукр. наук.-практ. конф. в онлайн-режимі за допомогою системи тісrosoft teams (Тернопіль, 20-21 трав. 2021 р.) /

Терноп. нац. мед. ун-т імені І. Я. Горбачевського МОЗ України. Тернопіль: ТНМУ, 2021. С. 17–19.

161. Сілкова О. В., Лобач Н. В. Сучасні тренди медичної освіти. *Сучасна медична освіта: методологія, теорія, практика*: матеріали Всеукр. навч.-наук. конф. з міжнар. участю, 19 березня 2020 р. Полтава, 2020. С. 190–191.

162. Сін Чжефу. Педагогічна підтримка адаптації іноземних студентів до навчання у вищих навчальних закладах України: автореф. дис. ... канд. пед. наук : 13.00.05 «Соціальна педагогіка» / Луган. нац. ун-т імені Тараса Шевченка. Старобільськ, 2015. 20 с.

163. Скрипник І. М., Шевченко Т. І., Сорокіна С. І., Шевченко С. С. Управління процесом соціально-фахової адаптації іноземних студентів до навчання у вищих навчальних закладах України. *Вісник проблем біології і медицини*. 2013. Вип. 1, т. 2 (99). С. 192–196.

164. Словник-довідник з професійної педагогіки / ред.-упоряд. А. В. Семенова. Одеса : Пальміра, 2006. 272 с.

165. Собченко Т. М. Дидактична система змішаного навчання студентів філологічних спеціальностей у закладах вищої освіти: дис. ... дра пед. наук: 13.00.09 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2021. 568 с.

166. Собченко Т. М. Дидактична система змішаного навчання студентів філологічних спеціальностей у закладах вищої освіти: автореф. ... д-ра пед. наук: 13.00.09 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2021. 42 с.

167. Собченко Т. М. Особливості навчання студентів-філологів в умовах інформатизації та цифровізації вищої освіти. *Професійна освіта: методологія, теорія та технології.* 2021. Вип. 13. С. 190–197.

168. Собченко Т. М., Доценко С. О., Лєбєдєва В. В. Використання цифрового контенту в освітньому процесі ЗВО. *Сучасні інформаційні*

технології в освіті і науці: матеріали III Всеукр. наук. інтернет-конфер. (Умань, 26–27 березня 2021 р.). Умань : Візаві, 2021. С. 87–90.

169. Современные образовательные технологии / под ред. Н. В. Бордовской. Москва : КНОРУС, 2013. С. 71–84.

170. Соколков Е. А. Проблемно-модульное обучение. Москва : ИНФРА-М, 2012. С. 16–48.

171. Сороківська О., Луциків І., Сороківський О. Вплив COVID-19 на набір студентів освітніх закладів України та Європи. *Актуальні питання організації навчання іноземних студентів в Україні*: матеріали V Міжнар. наук.-метод. конф. (14-16 жовтня 2020 р.). Тернопіль, 2020. С. 11–14.

172. Стандарт вищої освіти другого (магістерського) рівня, галузь знань 22 Охорона здоров'я, спеціальність 222 Медицина. URL: <u>https://mon.gov.ua/storage/app/media/vishcha-</u>

osvita/zatverdzeni%20standarty/2021/11/09/222-Medytsyna.mahistr.09.11.pdf (дата звернення: 07.10.2021).

173. Стандарти і рекомендації щодо забезпечення якості в Європейському просторі вищої освіти (ESG) = Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). Київ : ТОВ «Поліграф плюс», 2015. 32 с.

174. Стенина Н. С. Формирование профессиональной компетенции иностранных студентов, обучающихся в высших художественных учебных заведениях России: автореф. дис. ... канд. пед. наук: 13.00.08 «Теория и методика профессионального образования». Москва, 2007. 20 с.

175. Стратегія розвитку державного підприємства «Український державний центр міжнародної освіти». Київ, 2020. 48 с. URL: <u>https://studyinukraine.gov.ua/strategiya/ (дата звернення: 06.11.2021)</u>.

176. Стратегіярозвиткумедичноїосвіти.URL:https://moz.gov.ua/uploads/1/8475-medical_education_analytics.pdf (датазвернення:07.10.2021).

177. Стрельцова В. Ю. Соціальна адаптація студентів інституту культури і мистецтв до умов відкритого культурно-освітнього середовища: автореф. дис. ... канд. пед. наук : 13.00.05 «Соціальна педагогіка» / Луган. нац. ун-т імені Тараса Шевченка. Луганськ, 2009. 20 с.

178. Стрельцова В. Ю. Соціально-педагогічний супровід процесу соціальної адаптації студентів творчих спеціальностей до умов культурноосвітнього середовища. *Соціальна педагогіка : теорія та практика*. 2008. № 3. С. 27–32.

179. Стучинська Н., Ткаченко Ю. Теоретико-методологічні засади моделювання інформаційно-освітнього середовища медичного університету під час вивчення курсу медичної та біологічної фізики. *Наукові записки [Кіровоградського державного педагогічного університету імені Володимира Винниченка]*. Серія : Педагогічні науки. Кіровоград: РВВ КДПУ ім. В. Винниченка, 2011. Вип. 98. С. 267–271.

180. Субетто А. И. Система управления качеством в вузе (модель) / под науч. ред. Н. А. Селезневой и А. И. Субетто. 2-е изд. Москва: Исследовательский центр проблем качества подготовки специалистов, 2003. 25 с.

181. Субота Л. А. Комунікативний підхід до навчання професійноорієнтованому читанню іноземних студентів у немовному ВНЗ. *Одеський лінгвістичний вісник*. 2015. № 5. Т. 2. С. 149–153.

182. Субота Л. А. Самостійна навчальна діяльність іноземних студентів у вивченні текстів за професійним спрямуванням. *Вісник* Запорізького національного університету. 2012. № 1(17). С. 188–191.

183. Сурыгин А. И. Дидактические основы предвузовской подготовки иностранных студентов в высших учебных заведениях. СПб.: Нестор, 2000. С. 30.

184. Сучасне освітнє середовище вищого медичного навчального закладу як фактор його конкурентоспроможності / В. М. Ждан [та ін.].

Сучасні підходи до вищої медичної освіти в Україні (з дистанційним під'єднанням ВМ(Ф)НЗ України за допомогою відеоконференц-зв'язку): матеріали XIV Всеукр. наук.-практ. конф. з міжнар. участю, присвяченої 60-річчю ТДМУ (Тернопіль, 18–19 трав. 2017 р.) : у 2 т. / Терноп. держ. мед. ун-т імені І. Я. Горбачевського. Тернопіль: ТДМУ, 2017. Т. 1 С. 29– 33.

185. Сучасні підходи до вищої медичної освіти в Україні (з дистанційним під'єднанням ВМ(Ф)НЗ України за допомогою відеоконференц-зв'язку): матеріали XIV Всеукр. наук.-практ. конф. з міжнар. участю, присвяченої 60-річчю ТДМУ (Тернопіль, 18–19 трав. 2017 р.) : у 2 т. / Терноп. держ. мед. ун-т імені І. Я. Горбачевського. Тернопіль: ТДМУ, 2017. Т. 1. 211 с.

186. Тарасенко Р. О. Теоретичне обґрунтування моделі формування інформаційної компетентності майбутніх перекладачів для аграрної галузі. Вісник Дніпропетровського університету імені Адольфа Нобеля. Серія «Педагогіка і психологія». Педагогічні науки. 2014. № 2 (8). С. 81–86.

187. Тарита Л. Г. Методическое сопровождение инновационных процессов у управлении районной образовательной системой: автореф. канд. ... пед. наук. Бережнова Спб., 2001. 21 с.

188. Теоретико-методологічні засади формування здорового способу життя / О. Вакуленко. *Формування здорового способу життя*. Київ, 2001. URL: http://www.health.gov.ua/Publ/conf.nsf/165dc8dd0ddbb56dc2256d8f002 64254/d67de83e352f2e0fc2256ddc003ba99e?OpenDocument (дата звернення: 02.10.2021).

189. Ткачук Г. В. Теоретичні і методичні засади практично-технічної підготовки майбутніх учителів інформатики в умовах змішаного навчання: дис. ... д-ра пед. наук : 13.00.02 / Нац. пед. ун-т імені М. П. Драгоманова. Київ, 2019. 447 с.

190. Україна на міжнародному ринку освітніх послуг вищої освіти "Новини "*Свроосвіта*". URL: http://www.euroosvita.net/index.php /?category=1&id=3758 (дата звернення: 18.11.2022).

191. Ушакова Н. І., Дубічинський В. В., Тростинська О. М. Концепція мовної підготовки іноземців у ВНЗ України. Викладання мов у вищих навчальних закладах на сучасному етапі: міжпредметні зв'язки зб. наук. пр. Харків. 2011. Вип. 19. С. 136–146.

192. Филимонова Н. Ю. Влияние национально-психологических особенностей иностранцев на адаптацию в российском вузе. Методология обучения и повышения эффективности академической, социокультурной и психологической адаптации иностранных студентов в российском вузе: теоретические и прикладные аспекты: материалы всерос. семинара, Томск, 21–23 окт. 2008 г. Томск, 2008. Т. 2. С. 143–150.

193. Філоненко М. М. Методика викладання у вищій медичній школі на засадах компетентнісного підходу: метод. рекомендації. Київ: ЦУЛ, 2016. 88 с.

194. Форопонова А. А. Влияние социально-психологических качеств группы на успешность учебной деятельности иностранных студентов: дис. ... канд. психол. наук: 19.00.05. Курск, 2014. 158 с.

195. Франчук В. В. Місце, роль і значення лікарської професії в умовах сучасного українського суспільства. Вісник соціальної гігієни та організації охорони здоров'я України. 2017. № 3 (73). С. 35–41.

196. Фролова О. А., Скородулина Е. Ю. Модель информационной компетентности студента в сегменте высшего медицинского образования. *Смоленский медицинский альманах.* 2018. № 3. С. 22–26.

197. Харченко I., Шишенко I. Інформаційно-освітнє середовище закладу вищої освіти як підґрунтя для формування інформаційно-цифрової культури майбутніх фахівців. *Людинознавчі студії. Серія «Педагогіка»*. 2021. № 13(45). С. 78–84.

198. Хинзеева Н. П. Формирование комуникативной компетентности иностранных студентов в иноязычной образовательной среде: дис. ... канд. пед. наук: 13.00.01. Улан-Уде, 2017. 189 с.

199. Хоботова Н. В., Хоботова В. К. Роль сучасних методів навчання іноземних студентів. *Перспективні напрямки розвитку сучасних медичних та фармацевтичних наук*: матеріали міжнар. наук.-практ. конф. (09-10 лютого 2018 р., м. Дніпро). С. 32–33.

200. Хорват Д. А. Образовательная среда вуза как фактор формирования общекультурных компетенций студентов: дис. ... канд. пед. наук: 13.00.08 «Теория и методика профессионального образования». Москва, 2015. 176 с.

201. Хорват Д. А. Образовательная среда вуза как фактор формирования общекультурных компетенций студентов : автореф. ... канд. пед. наук: 13.00.08 «Теория и методика профессионального образования». Москва, 2015. 34 с.

202. Ху Жунсі. Педагогічні умови адаптації китайських студентів до культурно-освітнього середовища вищих навчальних закладів України: дис. ... канд. пед. наук: 13.00.05 «Соціальна педагогіка» / Луган. нац. ун-т ім. Тараса Шевченка. Луганськ, 2014. 230 с.

203. Ху Жунсі. Педагогічні умови адаптації китайських студентів до культурно-освітнього середовища вищих навчальних закладів України: автореф. дис. ... канд. пед. наук: 13.00.05 «Соціальна педагогіка» / Луган. нац. ун-т імені Тараса Шевченка. Луганськ, 2014. 20 с.

204. Циганко Б. А. Вдосконалення системи підготовки кадрів з числа іноземних громадян: доповідь директора Центру міжнародної освіти НТУУ «КПІ» в Національному технічному університеті України «Київський політехнічний інститут». *Київський політехник*. 2022. 10 січ. С. 3. URL: https://kpi.ua/files/1301.pdf (дата звернення: 09.11.2022).

205. Цюняк О. Інноваційне освітнє середовище як чинник професійного становлення майбутніх магістрів початкової освіти. *Інноваційна педагогіка*. Одеса, 2019. Вип. 14, № 1. С. 175–179.

206. Черненька Л. Б. Інформаційна компетентність педагога як складова його педагогічної майстерності. *Формування сучасного освітнього середовища*: теорія і практика: матеріали Міжвуз. наук.-практ. конф.: зб. наук. праць.Ірпінь, 2020. С. 73–75.

207. Шабанов А. Г., Шорохова Т. И. Образовательная среда инновационного вуза. *Философия образования*. 2009. № 1. С. 51–56.

208. Шишкіна М. П. Тенденції розвитку та використання інформаційних технологій у контексті формування освітнього середовища. Засоби і технології єдиного інформаційного освітнього простору / Ін-т засобів навчання АПН України. Київ : Атіка, 2004. С. 81–87.

209. Шишкіна М. П., Попіль М. В. Хмаро орієнтоване освітнє середовище навчального закладу: сучасний стан і перспективи розвитку досліджень. *Інформаційні технології і засоби навчання*. 2013. № 5(37). С. 66–80.

210. Шишкіна М. П., Спірін О. М., Запорожченко Ю. Г. Проблеми інформатизації освіти України в контексті розвитку досліджень оцінювання якості засобів ІКТ. *Інформаційні технології і засоби навчання*: електронне фахове видання. 2012. №1 (27). URL: http://journal.iitta.gov.ua/index.php/itlt/article/view/632/483 (дата звернення: 01.11.2022).

211. Шмоніна Т. А. Педагогічні умови природничо-наукової підготовки іноземних студентів на підготовчих факультетах вищих навчальних закладів: дис. ... канд. пед. наук: 13.00.04. Тернопіль, 2012. 241 с.

212. Шмоніна Т. А., Бойчук Ю. Д. Теоретико-методичні аспекти природничо-наукової підготовки іноземних студентів на підготовчих факультетах: монографія. Харків, 2013. 168 с.

213. Шолохов И. А. Психологические особенности адаптации учащейся молодежи за рубежом: дис. ... канд. психол. наук: 19.00.13 «Психология развития, акмеология» / Моск. пед. гос. ун-т. Москва, 2002. 235 с.

214. Штейміллер І. О. Науково-методичне забезпечення акультурації іноземних студентів класичного університету: автореф. дис. ... канд. пед. наук : 13.00.07 «Теорія навчання» / Харків. нац. ун-т ім. В. Н. Каразіна. Харків, 2015. 20 с.

215. Штейміллер І. О. Педагогічний супровід соціокультурної адаптації іноземних студентів під час навчання в українському університеті. *Актуальні проблеми державного управління, педагогіки та психології*. 2014. Вип. 2. С. 97–100.

216. Шумило М. Ю. Сучасний стан медичної освіти. Педагогіка формування творчої особистості у вищій і загальноосвітній школах. 2019. С. 220–224.

217. Ющенко Л. О., Тихолаз О. В., Олійник В. С. Особливості дистанційного навчання іноземних студентів під час пандемії COVID-19. *Медична освіта*. 2021. № 1. С. 69–74.

218. Ярошинська О. О. Теоретичні і методичні засади проектування освітнього середовища професійної підготовки майбутніх учителів початкової школи: дис. ... д-ра пед. наук: 13.00.04. Умань, 2015. 544 с.

219. Ясвин В. А. Образовательная среда: от моделирования к проэктированию. Москва : Смысл, 2001. 365 с.

220. Alberts H. C., Hazen H. D. "There are always two voices...": international students' intentions to stay in the United States or return to their home countries. *International migration*. 2005. T. 43, № 3. C. 131–154.

URL: https://doi.org/10.1111/j.1468-2435.2005.00328.x (дата звернення: 12.11.2022).

221. Altbach P. G. Globalization and the university: myths and realities in an unequal world. *Tertiary Education and Management*. 2004. Vol. 10. P. 3–25.

222. Arkorful V. The role of e-learning, advantages and disadvantages of its adoption in higher education. *International Journal of Instructional Technology and Distance Learning*. 2015. Vol. 12 (1). P. 29–42.

223. Barnett G. A., Wu R. Y. The international student exchange network: 1970 & 1989. *Higher Education*. 1995. Vol. 30, № 4. P. 353–368.

224. Beck G., Tsaryk O., Rybina N. Teaching and assessment strategies in online foreign languages distance learning. *Медична освіта*. 2020. No 2. C. 6–13.

225. Berry J. W. Immigration, acculturation, and adaptation. Applied psychology. 1997. Т. 46, № 1. С. 5–34. URL: https://doi.org/10.1111/j.1464-0597.1997.tb01087.x (дата звернення: 07.11.2022).

226. Distance learning in clinical medical education amid COVID-19 pandemic in Jordan: current situation, challenges, and perspectives / M. Al-Balas та iн. *BMC medical education*. 2020. Т. 20, № 1. URL: https://doi.org/10.1186/s12909-020-02257-4 (дата звернення: 07.10.2021).

227. Fields H. The path to becoming a doctor – article display content – qualityinfo. Welcome – QualityInfo. 2021. URL: <u>https://www.qualityinfo.org/-/the-path-to-becoming-a-doctor#:~:text=While%20no%20specific%20</u> <u>undergraduate%20degree,College%20Admissions%20Test%20(MCAT)</u> (дата звернення: 08.04.2022).

228. Furnham A. Culture shock: psychological reactions to unfamiliar environments. London: Methuen, 1986. 298 c.

229. Kremen V. Distance education in the context of visuality: pro and contra. *Міждисциплінарні дослідження складних систем*. 2020. № 17.

C. 14–20. URL: https://doi.org/10.31392/iscs.2020.17.014 (дата звернення: 07.11.2022).

230. Medical education during the COVID-19 pandemic: a single institution experience / K. Singh та ін. *Indian pediatrics*. 2020. Т. 57, № 7. С. 678–679. URL: https://doi.org/10.1007/s13312-020-1899-2 (дата звернення: 19.11.2021).

231. Perceptions of medical students towards online teaching during the COVID-19 pandemic: a national cross-sectional survey of 2721 UK medical students / S. Dost та ін. BMJ open. 2020. Т. 10, № 11. С. е042378. URL: https://doi.org/10.1136/bmjopen-2020-042378 (дата звернення: 07.11.2022).

232. Scott P. The Globalization of Higher Education. London: SRHE and Open University Press, 1998. 235 p.

233. Singh A. Modern medicine: towards prevention, cure, well-being and longevity. Mens sana monographs. 2010. Т. 8, № 1. С. 17–29. URL: https://doi.org/10.4103/0973-1229.58817 (дата звернення: 08.11.2022).

234. Singh A., Singh S. Emphasising prevention, developing therapies, complementing approaches. *Mens sana monographs*. 2005. Vol. 3, № 2. P. 15. URL: https://doi.org/10.4103/0973-1229.27880 (дата звернення: 08.11.2021).

235. The impact of the coronavirus on global higher education. *QS*. URL: https://www.qs.com/portfolio-items/the-impact-of-the-coronavirus-on-global-higher-education/ (дата звернення: 02.09.2022).

236. Tue B. B., Tye K. A. Global education: a study of school change. 2nd ed. Orange Independence Press, 1998. 114 p.

CHAPTER 4

THEORETICAL SUBSTANTIATION OF THE DIDACTIC SYSTEM OF INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS IN THE EDUCATIONAL ENVIRONMENT OF THE UNIVERSITY

4.1 General characteristics of the didactic system of information competence formation in international medical students in the educational environment of the university

In the process of the scientific search it is revealed that the study of the problem of forming information competences didactic system should be provided within the frameworks of perception as a holistic didactic system. Such an approach allows one to define its essence more clearly, identify the main links between the structural components of this system and establish their importance for its optimal functioning. It should be noted that the didactic system is a subsystem of the pedagogical system, which determines the expediency of determining its characteristic features and properties. A mandatory requirement for a pedagogical system is the presence in it of structural components (elements) that form the unity, as well as a hierarchical connection between them, which allows to create a coherent functional structure aimed at achieving a well-defined desirable learning goal. Each element of the system is the simplest part of it, which is conventionally considered indivisible, since it depends on specific tasks. It should be noted that the components of the system can act as subsystems, as they can perform their own tasks, goals, objectives, methods, forms and means of learning. In view of this, it can be stated that the components of the system act as separate systems. The structure of any system is defined as an organized set of connections between its components, which are considered irrespective of the processes that are in these

interconnections [14, c. 27; 177, c. 84-86; 193, c. 312]. Any pedagogical system is characterized by a holistic structure, in which the constituent components occupy their well-defined place, and the efficiency of functioning depends to some extent on the definition of the structural components of this system.

In order to design the didactic system of formation of information competence of students of medical specialties it is necessary to find out and analyze the views of scientists on the essence of this system, its structure and to clarify the requirements for its development. Since the didactic system is a kind of pedagogical one, it is first advisable to characterize the pedagogical system as an object of scientific knowledge. In this respect, the scientific achievements of Y. Mamontov, who was one of the first scientists who began to use the concept of "system" in pedagogy and defined the "pedagogical system" as a logical, structured association of pedagogical categories, methods, ideas that reflect certain connections and relationships [122, p.133]. The scientist also considered that the scientific substantiation of the system involves determining the purpose and illumination of the interpretation of pedagogical factors, where the absence of at least one of the necessary components will make the pedagogical system either incomplete or unfinished, and the mechanical combination of heterogeneous parts indicates logical incontinence [123, p.17-18].

V. Bespalko defined the concept of "pedagogical system" as a kind of system within which different processes of pedagogical character are carried out. According to the scientist, the pedagogical system is a holistic, closed structure, the activity of which is conditioned by social order [14, p.25]. According to the researcher, the following should be attributed to the pedagogical system:

- goals (general and partial);
- subjects (students, teachers);
- content;
- processes (training and education);

- material and technical base;
- technical training tools;
- organizational forms of pedagogical work [14; 15].

According to V. Bespalko, the integrity of the pedagogical system is determined by its internal unity, cohesion, gualitative certainty, integrativeness, high development results, a certain relativity and existence only under the conditions of successful functioning of this formation. Researcher N. Kuzmina under the term "pedagogical system" understands a set of interrelated structural and functional components that are subordinated to the purpose of education and upbringing of personality [107, p.11]. According to the scientist, the pedagogical system should be simple and necessarily contain structural and functional components. Moreover, any pedagogical system includes the following structural components: purpose, content of training (information), means of pedagogical communication (forms, methods, teaching aids), subject (teacher) and object (students). The presence of these well-defined components is a necessary and sufficient condition for the creation of a pedagogical system, since the absence of at least one of them makes it impossible to build a pedagogical system [106, p. 13]. Thus, the researcher attributed to the structural components of the pedagogical system its basic characteristics, the totality of which distinguishes this particular system as significantly different from other systems [107, p. 11]. N. Kuzmina also identified the functional components of the system. The author attributed to them such as: gnostic, projecting, constructive, communicative organizational, and which determine the development and improvement of the pedagogical system, ensure its viability and, in particular, the mobility and stability of this formation [106, p. 15 - 18].

L. Viktorova defines the pedagogical system as an orderly set of interrelated components that form its holistic unity and subordinate to certain goals of education and upbringing [32, p. 21]. Exploring the pedagogical system, the scientist focuses on its leading property - integrity. Moreover,

concerning the structural components of the pedagogical system defined by N. Kuzmina, the author considers it as expedient to add another component - the result. L. Viktorova also argues that the effectiveness of a particular pedagogical system is determined by the level of success of its subjects [32, p. 21].

S. Roman believes that the pedagogical system is aimed at a specific pedagogical result and is a set of ordered on certain features of related components that together form a managed integrity, as well as united by a common purpose of functioning [135, p. 5-6].

The scientific achievements of T. Zhizhko applicable to our research, in which the pedagogical system is considered as a dynamically functional complex of dialectically interconnected components and elements, where they should provide optimal conditions for solving the tasks of learning and nurturing personality. The scientist notes that the components of a holistic pedagogical system are only relevant in their organic unity with other components, and no change in at least one of them should be allowed, as this may dialectically cause changes in other components (elements) of the system. We also share T. Zhizhko's opinion that, when solving a number of educational problems, it is important for researchers to maintain systematicity in their activities and to take into account the regularities of the functioning of a particular pedagogical system [60, p.145].

As it is found out, in the scientific literature, the definition of "system" is often associated with the concept of "model", which is the result of the modeling process, that is, the study of objects by constructing models as hypothetical systems containing interrelated components [208, p.81]. The analysis of interpretations by different scientists of the concept of "model" allowed us to draw some conclusions, namely:

 in the broad sense "model" is a system that can be presented and materially implemented, reproduced and displayed as an object of study, obtain new information about this object [23; 208; 230];

In the narrow sense, "model" is an image of a certain phenomenon with the help of another, which is more studied and understandable [23; 208; 230];

 Models are related to simplified theories that allow one to study the different relationships between selected indicators in society;

In the role of the model as a simplified replacement of a particular object, process, phenomena appropriate schemes, graphs, etc. can be used [23; 208];

- The model acts as an instrument or form of knowledge of the selected object of study [58; 193; 230].

As O. Vyazov emphasizes, the structure of the pedagogical system implies the obligatory presence of interconnected components (elements) that contribute to ensuring the integrity of the system, as well as its full functioning in accordance with the set goals and objectives. Such functional components (elements) of the pedagogical system should be the basic links between the initial state of its structural elements and the expected end result. But, according to the researcher, the content of functional components can change under the influence of purposeful pedagogical influence [34; 193].

We also share S. Belyaev's opinion that any pedagogical system should be rearranged "as a set of objectively scientifically sound structural elements, the interaction of which reflects objective pedagogical patterns" [16, p. 32]. As it is stated in the study, the set of structural components (elements) of the pedagogical system is sufficiently constant in composition, that is, it can have only insignificant differences. In particular, the structural components of any pedagogical system are, as a rule, the following:

goals and objectives, which are to organize appropriate conditions,
opportunities, influences; subjects of pedagogical process;

- the content of education, which is regulated by the relevant curricula;

 purposeful activities aimed at the realization of a specific goal and objectives, means of training and education, providing favorable conditions for the implementation of these processes;

- organizational forms of education and upbringing, methods, techniques, various forms and types of communication, as well as the connections and relationships between these elements [49; 86; 154; 193].

- It should be noted that O. Kovalev identified some other structural components of the pedagogical systems, namely:

- subjects (students as participants of the pedagogical process and teachers, who in the process of transition of scientific knowledge make it accessible to assimilation;

- accumulated by humanity knowledge as the subject of this process;

- a set of semiotic structures for the implementation of coding and accumulation relevant content of education;

– ways of achieving the set goals - means, forms and methods of pedagogical interaction; performing by teachers a number of specific functions, the main among which is the management of the pedagogical system [88, pp. 15-16].

In the dissertation of O. Marchenko, it is stated that the pedagogical system may contain some other subsystems such as:

- social and psychological (people and interrelations between them);

organizational and pedagogical (forms of organization of training, methods, principles, means, technologies of its implementation); information (necessary for the implementation of the educational process);

- logistical (technical means of training, living conditions of participants in the educational process) [125, p. 200].

Significant for our study is the position of V. Proshkin, according to which the structure of the pedagogical system contains such components, such as:

- purposeful (purpose, task, result);

- subject-objective (teachers and students, their interaction in the context of the implementation of the research object);

content-oriented (forms and methods of implementation of the pedagogical process);

- technological (technology of implementation of different forms and methods of pedagogical process) [154, p. 338-339; 169, p. 9-10].

The analysis of encyclopedic sources shows that the structure of each pedagogical system consists of a set of such interrelated invariant components:

- educational applicants (persons to be trained and educated);

- the purpose of education or upbringing (what to learn and educate);

- the content of education and upbringing (why teach, what qualities to educate);

pedagogical processes;

- teachers (or technical training and education);

- organizational forms of education or upbringing [57, p. 649-650].

We emphasize that any pedagogical system has a well-defined purpose that aims to achieve a predicted and desired result. Moreover, the study identified that today there is no generally accepted definition of the very concept of "purpose of the pedagogical system". Thus, in the scientific and pedagogical literature, this concept is interpreted differently, in particular as: ideal, desire, end result, specific product of activity, etc. [42; 86; 98; 211].

In the context of the problem raised, the opinion of scientists (S. Bader, P. Verbitskaya, V. Korbutyak, O. Kustovskaya, etc.) is also correct that the purpose of the system should be a kind of cell or core, around which all other

system components will be built. After all, the goal is the most important semantic factor of the system, which in general makes it possible for its successful functioning [9; 30; 97; 111].

Based on the theoretical analysis of the scientific literature on the outlined problem, it is determined that there are different views of scientists on determining the location of the goal in the general structure of the pedagogical system. In particular, some researchers (S. Bader, V. Bespalko, K. Soroka, N. Tkachev, etc.) consider that the goal is the most important component of the pedagogical system [9; 14; 15; 86; 193; 196; 214; 215].

Other scholars (G. Alexandrov, N. Ivankova, N. Timoshkin, T. Chshiyev, B. Dolynsky, etc.), on the contrary, do not refer a purpose (goals) to the elements of the structure of the system. Thus, B. Dolinsky notes that the purposefulness and expediency of the educational process is determined by the joint, subject-subject activity and communication of its participants, and the purpose is a reflection of the social order and can be manifested and gain significance at different stages of the educational process [53, p. 52].

It should be noted that in the scientific literature there are the following two main factors for defining the goals of the pedagogical system:

- social demand, or global goals, which are determined by the request and requirements of society for the individual and, in particular, for future professionals. These requirements are formulated in the relevant regulatory documents;

- transformed social demand, that is, the goals of the pedagogical system, which are implemented by pedagogical processes within it [2; 9; 53].

In the light of this, scientists see the existence of interconnection and interplay between the goals of the system, and global goals are transformed, changed and become refined goals of specific pedagogical systems that reflect the demands of society for youth and in general to all its members [2, p.137; 86, p. 331]. As the study states, the scientific and pedagogical literature identifies

the main features, types and kinds of goals of the pedagogical system. In particular, it is determined that the goals of the system can be differentiated:

1. By timing features:

tactical (achievement of the result in a clearly defined and short-term period);

 strategic (the process of achieving the result is prolonged and is conditioned by the presence of a specific result according to the set goals);

- ideals (a goal that cannot be achieved, but which the system constantly strives for, realizing tactical and strategic goals) [32; 106; 107; 123].

2. By methods of implementation:

- functional (ways of realization of goals are known and tested);

the purpose-analogue (the ways of implementation are known, but not tested, only the ways of realization of a similar system, similar conditions, etc.) are tested;

- the purpose of development (ways of realization are unknown, the goal is fundamentally new, but it defines the implementation of the new system) [27; 97; 110].

3. By the nature of the organization of the system:

- subjective (the system for the realization of the goal is created by a specific subject);

objective (the goal is realized by the objective fact of the system's functioning in specific conditions and during its rational management) [86; 42; 196].

A thorough study of this problem allowed us to determine the main characteristics of the purpose of the pedagogical system, which was taken into account by us in the development of the author's didactic system in the outlined problem:

each pedagogical system has a specific purpose or set of several goals and created to achieve a specific purpose (goals);

a set of goals has a defined hierarchy: main, primary and secondary goals;

- the "goal" category is not deterministic and fixed as it may be modified, refined and adjusted according to the circumstances;

- the goals identified are interrelated, dynamic, and affect current tasks;

- all natural systems have objective goals, and artificial systems have subjective goals [2; 27, 97, 111; 196].

According to scientists (N. Kuzmina, O. Novikov, D. Novikov, etc.), the main requirements for defining the goals of the pedagogical system are the following: *concretization* - goals are formulated taking into account the objective opportunities for their achievement in the conditions of a specific system; *differentiation* - common goals are distributed as a set of intermediate goals of the system, reflecting the course of its step-by-step implementation; *diagnosis* - defined common goals can be refined and adjusted, which is traced in the system of formulation of its intermediate goals; *optimality* - realization of well-defined goals according to a rational and controlled algorithm; *effectiveness* - the focus of goals on the comprehensive harmonious development of the applicant as a person [106; 107; 141].

It should be noted that the analysis of the scientific and pedagogical literature made it possible to distinguish the classification of varieties of pedagogical systems, which differ in certain features and characteristics. In particular, the following types of systems are distinguished:

1. by the specifics and the possibility of its restructuring on the basis of taking into account the objective laws of social development:

natural (systems of inanimate (physical, chemical) and living (biological) nature);

artificially created, anthropogenic (created by man to meet his needs, covering technical (technical, economic) and social (public) systems) [46; 73; 114; 148; 179; 186; 193].

2. by purpose and management system:

– production;

servicing;

– management [46; 177; 193; 214; 215; 224].

3. by the nature of the interaction with the environment:

- open (sensitive to external manifestations through close interaction with the external environment);

– closed, isolated (do not interact with the external environment or interaction occurs in a limited range, when there is a well-defined algorithm and there is an established, unchanged nature of the influence of the environment on the functioning of the system);

- combined, relatively separated (these systems include both open and closed subsystems, as well as the separation of structural components of subsystems) [14; 161; 193].

1. by the nature of the connections and the behavior of the components:

 deterministic (there is a clearly defined nature of the links between the elements of the system);

- stochastic, probabilistic (the probabilistic nature of the behavior of the pedagogical system is observed) [14; 15; 86; 161; 169; 213].

2. for the performance and implementation of functions:

- specialized (have only one purpose);

- multifunctional (perform several different functions);

universal (provide a variety of functions for the implementation of a wide range of system tasks) [14; 161; 193; 213].

Describing different classifications of pedagogical systems, V. Proshkin argues that pedagogical systems should be considered at three levels, namely the following:

macro level (state education system, regional education systems, public education system);

mezzo level (activities of educational institutions, children's organizations, public institutes of pedagogical direction);

- micro-level (pedagogical systems that implement specific tasks and have narrow functions, author's pedagogical systems, etc.) [169, p. 10].

In the process of studying the basic characteristics of pedagogical systems, it is also established that they are divided into the following types: simple and complex. Simple pedagogical systems are those in which it is impossible to distinguish hierarchical levels and to establish relationships between them, to determine a clear number of elements that are in certain connections both within the system and with the environment. In view of this, elements of a simple system implement only the simplest functions [4; 154; 158; 174; 193]. For complex systems, they are characterized by heterogeneity, structural diversity, since they contain sufficient or large number of elements that are in the internal connections. And each of them can be an independent and autonomous system with its own subsystems and perform one complex or several functions at once. It should be noted that it is difficult to study such systems, since the nature of the development of such a system is uncertain. In turn, this requires the joint involvement of scientific research in various scientific fields, the use of various scientific theories and models [154; 158; 174; 193].

The theoretical statements of scientists (G. Alexandrov, N. Ivankov, N. Timoshkin, T. Tshieva, etc.) on the properties by which pedagogical systems

can be defined as large, complex, organic, purposeful, social, dynamic, probabilistic and open are also also in the study. Among these properties are the following:

- inability to fully formalize the management object;

- instability of the structure and functioning of this object;

 multicriteria of management, lack of unambiguous and clear definition of the criteria for the efficiency of the system and the expediency of their election;

- presence in the pedagogical system of people who have considerable freedom of action within its functioning [154, p. 138; 193, p. 316].

In view of the above and guided by the above theoretical provisions, it can be summarized that any pedagogical system can be attributed to a number of complex, artificially created, open, probabilistic systems, each of which represents a set of hierarchically related components. According to the study, the didactic system as a subsystem of the pedagogical system is inherent in all the above features. At the same time, it should be noted that the didactic system has its own specificity, which necessitates a clear definition of the essence of this concept.

Thus, according to I. Podlasy's findings, this system is a certain holistic formation that has the internal integrity of structures, which is ensured by the unity of goals, objectives, principles, content, methods and forms of learning [158, p. 301, 302]. I. Soloshich defines the didactic system as a didactic-verified set of interconnected blocks (components) that reflect the sequence of organization and implementation of purposeful didactic influences to ensure its effective functioning and achieve the intended result, taking into account the possibility of creating favorable conditions for this process [195, p. 224]. I. Osadchenko under the didactic system understands the set of didactic components (content, principles, forms, methods, teaching aids, etc.),

"functionality of which depends on general paradigm (defined by historical circumstances and social needs) requirements" [147, p. 39].

Taking into account the above views of scientists, it is concluded that within the study of the problem the didactic system of formation of information competence of foreign students of medical specialties in the educational environment of the university refers to the whole set of blocks-components, the consistent implementation of which ensures the formation of the competence in the future. During the design of this system, the scientific achievements of various researchers were considered.

Thus, in this respect, the model of formation of information competence of future translators for the agricultural industry developed by R. Tarasenko aroused considerable interest. This model is aimed at systematizing the process of professional training of future translators in order to meet the needs of society to train qualified specialists with a high level of information competence [208, p. 82]. In particular, this model reflects the purpose, content, methods, means, forms, principles, stages, implementation of the process and combines the following six blocks: targetive, strategic and regulatory, theoretical and methodological, organizational and content-oriented, diagnostic and resultative [208, p. 83].

The targetive block of the model reflects the purpose and objectives of forming the information competence of future translators. Strategic and regulatory ensures the coherence of the process of forming the information competence of future translators with international and national educational programs and standards in the context of compliance with the needs of employers and the students themselves. The theoretical and methodological block of this model reflects the selected basic approaches and principles that underlie the formation of information competence of future translators. The organizational and content-oriented block of the model regulates the meaningful filling of the process of formation of information competence of the students at

all stages of their training, determines the forms and means of training in accordance with the determined content of education. The diagnostic unit involves assessing the achievements of students to form their information competence in accordance with the tasks set based on the use of certain methods and diagnostic methods, selected criteria and indicators. The resultative block reflects the expected result of the process, which describes the developed model, namely - the formation of information competence of future translators for the agricultural sector [208, p. 83-85].

The didactic system of teaching foreign languages of students of philological specialties with the use of technological innovations developed by O. Osova in the course of the research was useful. This system contains five components: targetive, organizational and motivational, content-oriented, procedural, resultatative-evaluative. According to the author, the key role in this system is played by the procedural component, which is aimed at the introduction of technological innovations, tools, methods, forms of learning, search for new educational paradigms, principles, approaches of organizing the educational environment of students [149, p. 256-260].

The theoretical ideas of I. Volodko, who developed a model of formation of information and communication competence of specialists of physical education and sports in professional activity, also attracted our attention. This model combines the following blocks: targetive, theoretical and methodological, content-oriented, organizational and technological, resultative-evaluative [33, p.56-57].

In the process of scientific search, the model of formation of information competence of students of technical higher education, developed by L. Dobrova, was also taken into account. This model includes the following components:

targetive (determining social demand of society);

- purpose (formation of information competence of students of technical university);

 tasks (ensuring pedagogical conditions of formation of information competence of students of technical university); content (content of education);

- functional (realization of the process through the implementation of design, organization, motivation, control, communication);

- evaluation (determination and identification of levels of formation of the specified competence) [50; 51].

The model of formation of information and communicative competence of future family doctors developed by K. Ordu was also used in the study. This model reflects: the purpose, stages, pedagogical conditions, forms, methods and means of their implementation, components, criteria and the end result of the process and consists of the following components: motivational, cognitive, activity-oriented, personality-oriented [146]. Let's look at them in more detail.

The motivational component occupies in the structure of formation of information and communication competence of future family doctors the leading place, since it is precisely the formation of motives to be a family doctor determines the effective implementation of their future professional activity. According to I. Humenna, it is the motivation of the students that makes it possible to justify the need for training for the effective implementation of professional medical activity, which implies a positive attitude to the implementation of information and communication activities [47, p.102]. In view of this, maintaining a high level of motivation will help students to become aware of information competence for the effectiveness of professional medical activity.

The cognitive component involves providing students with knowledge, methods, means, strategies of information competence, which promotes successful professional activity in professional conditions. The activity-oriented component is aimed at the formation of skills, the ability to use future physicians information resources, information and communication technologies used in medicine. The personality-oriented component is related to the

formation of the totality of personal qualities of the future doctor, which will affect the effectiveness of the activity in the specialty [47; 146].

In the process of scientific search, the system of formation of information competence of future elementary school teachers designed by O. Drokina was also analyzed. This system contains a set of relevant components that form the structure of the pedagogical system, determine its development and improvement. In particular, this system is implemented through the close interaction of the following structural components:

 methodological and targetive (purpose, methodological approaches, principles of implementation of the process of formation of information competence, function);

 content-technological (components of information competence, stages, technological measures, content of education, independent work, forms and methods of formation of information competence of students);

- control and resultative (mechanism of pedagogical diagnostics of the process of formation of information competence of future teachers) [55, p. 3].

The pedagogical system of forming the educational environment in the aviation higher education institution, developed by O. Marchenko, was also useful. This system is a holistic entity that consists of the following interrelated components (subsystems): purposeful, theoretical, substantive, technological and analytical-resultative. As it is proved by the researcher, the introduction and implementation of the pedagogical system made it possible to improve, first of all, the state of formation of the educational environment of the institution of higher education, to improve the quality of professional training of specialists, to increase the indicators of educational activity [125, p. 228-237].

Lately training of students has taken place mainly in a mixed format, considerable interest in the study was aroused by T. Sobchenko developed and introduced into the educational process of the university didactic system of

blended education of students of philological specialties in higher education institutions. This system includes the following blocks:

conceptual target (purpose, tasks, scientific and methodological approaches, functions of the system, principles of realization of mixed learning of students of philological specialties);

content-technological (structural components of educational achievements of students, stages and organizational and didactic conditions of realization of their blended learning, corresponding didactic tools: models, methods, forms, means of training);

- diagnostic-resultative (criteria, indicators, levels, methods of diagnostics and diagnostic methods, as well as the expected result of implementation of the system) [193, p. 312-329].

In the context of the raised problem of research it is also worth noting the model of methodical system of practical and technical training of future teachers of informatics developed by G. Tkachuk in the conditions of blended learning, which contains the purpose, content, methods, means, organizational forms. This model consists of targetive, content-oriented, operational and activity-oriented, control-regulatory and evaluation-resultative components, which determines the expected level of formation and technical competences of students [218, p.187-191].

As our problem of research is related to the education of foreign students, O. Bilyk proposed a structural and functional system of social and pedagogical support for the socialization of foreign students in the educational and cultural environment of higher education institutions in Ukraine. This system includes the following interrelated components:

subject-object (subjects and objects);

conceptual and targetive (purpose, methodological approaches, principles, regulatory framework, conditions, factors);

environmental (structure of educational and cultural environment of higher education institution);

content-technological (content, directions, stages, forms, methods of work);

- resultative (criteria, indicators and levels of formation of sociality of foreign students) [18, p. 295].

As it was found out in the dissertation research of V. Sviridyuk the following structural components of the model of formation of information and communication competence of masters of nursing on the basis of technological approach are highlighted: motivational-targetive, cognitive, operational and activity-oriented and control-resultative [178, p. 114].

It is advisable to note that in the scientific works of S. Belyaev, O. Vyazova, T. Sobchenko, A. Tkachov the basic functions of the didactic system are distinguished, namely:

intersocial (formation of such qualities and properties in the applicants of education that will contribute to the use of the potential of each personality to solve the global problems of humanity;

social (preparation of young people for full-fledged life in modern society);

 systemic (combination of theoretical and practical knowledge of the subjects of learning, substantive and procedural aspects of the educational process through the interpenetration and interconnection of all components of the system);

 prognostic (strategy of further development of the system, its interaction with external environmental factors, with general socio-economic conditions of social development);

 research (definition of educational and cognitive needs of subjects of educational activity and study of factors of optimization of functional-structural system);

 informational (broadcasting to the subjects of pedagogical interaction of necessary knowledge and creation of appropriate educational content);

methodical (creation of appropriate methodological support of the educational process, which contributes to improving its efficiency);

technological (active use in the process of implementation of the developed system of modern educational technologies);

 motivational (providing stimulation and motivation of educational and cognitive activity on the basis of consideration of needs, motives, attitudes, interests of higher education applicants);

management (principles of management of the developed system)
[16; 34; 193; 213].

As it is stated, N. Zhitenova distinguished several other functions of the specified system within the intensification of the educational process, such as:

- increasing the information saturation of the educational process;

- compression of educational material;

 adequacy of presentation of educational material in accordance with the psychophysiological characteristics of students;

reduction of low-efficiency phases of the educational process;

rational organization of educational and cognitive activity of students
[61, p. 188-189; 193, p. 325].

The main functions of the model of formation of information competence of educational recipients were also revealed by A. Drokina:

- information retrieval (consists in the formation and activation of students' ability to navigate a wide flow of information, find the necessary

information and distinguish it, evaluate the reliability and significance of new information);

information and methodological (involves the implementation of critical analysis and synthesis of information, evaluation of teaching staff, network resources, services, technologies that ensure the success of professional activity);

- developmental (aimed at the development of future professionals of professional thinking, ability to reflect, abilities and qualities that are connected with the perception, comprehension and translation of professionally important information, stimulating the development of interest in the implementation of activities in the information sphere) [55, p. 82-83].

In the context of the problem of research, it is also advisable to identify the main functions of information competence as a personal phenomenon. In this regard, S. Trishyna and A. Khutorsky distinguishes the following functions:

 cognitive (epistemological) - systematization of knowledge and directing of man to the knowledge of the world and self-knowledge;

 communicative - interaction with different media, in particular with intelligent and automated training programs, telecommunications, hypermedia systems;

 adaptive - adaptation of a person to rapidly changing conditions of life and requests of the information society;

 normative - conformity of the set of generally accepted norms and requirements of society, professional activity;

 evaluative (informative) - formation and activation of human skills to navigate a wide flow of information, analyze and filter it, evaluating the significance of different data;

- developmental - involves the integration of all identified functions and ensuring the development of personality [55; 220].
It should be noted that the above ideas of scientists became the theoretical basis for the development and scientific substantiation of the author's didactic system of formation of information competence of foreign students of medical specialties in the educational environment of the university. As defined, this system consists of the following units:

1. Predictive and targetive (contains the purpose and objectives of the system).

2. Conceptual and methodological (reflects the concept of research, defines scientific and methodological approaches of research, reflects the properties, functions and principles of formation of information competence of students of medical specialties).

3. Theoretical and content-oriented (identifies structural components and reveals the content of information competence of foreign students of medical specialties).

4. Activity-oriented and procedural (defines the stages of formation of information competence of foreign students of medical specialties, pedagogical conditions, methods, forms, means of successful implementation of this process.

5. Resultative and evaluative (highlights the criterion-diagnostic base of the research: criteria and indicators, levels of formation of information competence of foreign medical students diagnostics techniques), as well as the expected result of implementation of the developed system).

The author's didactic system of formation of information competence of foreign students of medical specialties in the educational environment of the university is created as a coherent unity and adequately reflects the implementation of this process.

The system is presented in Fig. 4.1



Figure 4.1 The didactic system of information competence formation in international medical students in the educational environment of the University

4.2 Characteristics of structural units of the didactic system of formation of information competence of international medical students in the educational environment of the university

4.2.1 Predictive and targetive unit

The predictive and targetive unit of the didactic system of information competence formation in international medical students in the educational environment of the university involves determining the priorities of social demand in this field of education, formulating a clear purpose (goals) as a design of the desired result and the main tasks of the system implementation. In the light of this, it should be emphasized that the process of further development of the information society is going in faster paste. Therefore, information becomes a sought-after and most important resource for the professional development of specialists of all specialties in higher education institutions, in particular in the field of medical education. As it is found out, up-to-date modernization of education of this profile involves:

increasing the amount of medical knowledge and their constant updating;

development of innovative learning technologies and active implementation of them into practice;

- ensuring academic mobility of students [185, p. 130].

It should be noted that the reforms taking place in the field of higher education reflect the integration of Ukraine into the European space and are aimed at creating optimal conditions for the formation of a competent and highly qualified specialist in all industries. It is obvious that the use of modern information technologies in the preparation of future physicians, regardless of their specialization, is justified, since the degree of their professionalism and competence depends on the health and well-being of the nation.

In turn, the requirements for the need to develop the information competence of students and, in particular, higher medical education, are formulated in many regulatory documents on which the standard of higher education is based. Among these documents are the following:

- the Law of Ukraine "On Higher Education" [162];

- Law of Ukraine "On Education" [166];

National Classifier of Ukraine: Classifier of Occupations DK 003:
2010 [87];

– National Qualifications Framework, 2011 [163];

- List of branches of knowledge and specialties for which higher education applicants are trained 2015 [164];

– Resolution of the Cabinet of Ministers of Ukraine of December 28, 2020 No. 1337 "Regulations on the organization of the educational process in health care institutions with the participation of scientific and pedagogical workers of higher education institutions providing training of higher education applicants in the field of health care" [165];

Ordinance of the Cabinet of Ministers of Ukraine of February 29,
2019 No. 95-p. "Strategy for the Development of Medical Education in Ukraine" [207];

- Guidelines for the development of higher education standards. Approved by the Order of the Ministry of Education and Science of Ukraine dated 01.06.2017 №600 (in the wording of the order of the Ministry of Education and Science of Ukraine dated 30.04.2020 №584 [128];

- Standard of Higher Education of the second (master's) level, the field of knowledge 22 Health care, specialty 222 Medicine [202].

In particular, in the Law of Ukraine Education policy is formed and implemented on the basis of scientific research, international commitments, domestic and foreign experience, taking into account forecasts, statistics and

development indicators in order to meet the needs of human and society [166]. This document also states that information and communication competence is one of the key competencies that is to be formed. Modern concept of higher education in Ukraine is based on a competence-oriented approach, which brings the national higher school closer to European and world standards [167, p. 2]. In the light of this, the idea of the urgent need to form information competence as a component of the professional competence of future professionals, including medical profile, is contained in many modern scientific sources. In particular, O. Silkova and N. Lobach point out that it is difficult for specialists in the medical field to remain competent in the application of innovative information technologies in their professional activity. Therefore, there is an urgent need to create a modern educational environment in higher medical education institutions, which will contribute to active formation of information and digital competence of students. This involves paying special attention to ensuring their mastery of the following skills:

confident use information technologies to collect, store, process, transmit information not only in professional (business) but also in private communication;

 independent mastering and effective using computer programs for various purposes (general and special programs intended for use in the field of treatment of people and their health);

- prompt search for the necessary medical information.

Therefore, a modern graduate of a higher medical education institution should be ready for the effective application of the acquired theoretical and practical knowledge in their professional activity, demonstrate their competence and responsibility, possession of the chosen specialty, ability to navigate in related fields of activity, to carry out constant professional growth, to provide professional mobility. At the same time, one of the required components of the professional competence of a medical worker is the formation of information

competence. As the acting Director General of the Directorate of Education, Science and Personnel of the Ministry of Health of Ukraine N. Martynov emphasizes: "The health of our citizens depends on the quality of medical education tomorrow, so a competent specialist is a key subject in providing quality medical care" [167]. At the same time, the importance of forming the information competence of foreign students of medical specialties in the educational environment of the university is conditioned by the request of employers and modern society in general for training qualified specialists in the field of medicine, who should be well aware of modern information technologies.

It should be noted that the development of the didactic system of formation of information competence of international medical students in the educational environment of the university involves determining the purpose (goals) of this process. Let us clarify that within the framework of the study we see some differences between the concepts of "purpose" and "goals". Thus, in the reference and scientific-pedagogical literature, the purpose is interpreted as:

- the ideal subject of the conscious or unconscious desire of the subject, the end result to which this process is directed [3; 69; 232];

ideal model, imaginary prediction of the result of the activity of an individual, group of people or society in general [3; 36; 39; 86; 215];

- subjective image of the desired result of the expected activity or action [170, p.159];

 conscious prediction of the expected result of the activity, which leads to the search for the means and ways to achieve it [223, p. 371];

a conscious image of the expected result to which the action is directed [72, p. 50];

- the chosen goal, what someone wants, what they want to achieve [189, p. 683].

– prediction of the result in mind [39; 86; 203].

Therefore, it can be stated that the concepts of "purpose" and "goal" are often perceived by scientists as synonymous. However, within the framework of the study, we believe that the concept of "purpose" is more global, because it reflects the end result of a particular activity, and therefore the purpose takes a long time to realize it.

Perceiving the purpose as a system-forming component of the didactic system, we consider it advisable to distinguish the following main characteristics:

- specificity (the purpose should be formulated clearly and unambiguously [121, p. 23];

diagnostics (provides an accurate description of ways to achieve the goal and manifestations of the planned result) [121, pp. 136-137];

versatility - realization of the purpose, regardless of the existing conditions and for any subjects of the educational process [83, p. 23];

– hierarchy (the realization of the goal is carried out according to the level of significance and scale of the posed pedagogical problem at different levels of its solution: from meeting the needs of the individual to the social demand of society [86; 121; 152].

Researchers (O. Nazarova, A. Tkachov, T. Sheblykina) state that the time of a clear definition of the purpose of realization of any didactic system must be adhered to the appropriate algorithm and logic of thinking. In particular, the purpose should be:

- clear, real, feasible, but not too easy for participants in the educational process;

– to exist only in writing;

- specify the end result and the time of reaching it;

 point to a quantitative result, as it is necessary to prove the fact that the goal is reached;

- determine and maximize all available resources for its implementation;

outline the functional responsibilities of all performers, minimize the possibility of double responsibility for the result of joint work;

to be in demand, to meet the requests of the performers, to take into account their interests;

 to be humanistic in nature, preventing conflict situations and, if necessary, constructively resolving them;

- to provide optimal amount of time and resources;

 to provide clear principles and methods of scientific organization of labor [137; 193; 213; 232].

Therefore, the process of forming the information competence of international medical specialties in the university's educational environment involves a clear definition of the purpose as a prediction of the ideal result.

The well-known researcher B. Bloom's studies were also extremely useful, according to which educational goals should be formulated and implemented at different levels: knowledge, understanding, application, analysis, synthesis and evaluation. In the light of this, the hierarchy of different educational goals that consistently fit into the following chains should be clearly defined: know \leftrightarrow understand \leftrightarrow interpret \leftrightarrow transform \leftrightarrow predict \leftrightarrow repeat \leftrightarrow express \leftrightarrow analyze \leftrightarrow highlight basic thought \leftrightarrow find errors in the logic of reasoning \leftrightarrow determine the significance of the facts \leftrightarrow to synthesize knowledge to transfer to different fields of knowledge \leftrightarrow to design a work plan \leftrightarrow to replace incorrect statement in the text or conversation with correct one \leftrightarrow to eliminate errors in time \leftrightarrow evaluate the logic of reasoning, conformity of conclusions and available data \leftrightarrow summarize \leftrightarrow express consent or

disagreement \leftrightarrow apply concepts in new situations \leftrightarrow use theory in specific practical situations \leftrightarrow demonstrate correct fulfillment of a certain procedure [193, 331-332; 232, p. 228; 235, p. 14].

In view of the above considerations, it is concluded that the main purpose of the didactic system of formation of information competence of international medical students in the educational environment of the university is to ensure its formation in future medical professionals. This purpose involves its specification in a number of relevant tasks.

Let us clarify that the tasks reflect the realization of the purpose of students' learning activities in certain conditions and require the use of optimal learning tools for their achievement [193; 232]. As defined in the study, the stated purpose of the pedagogical system of formation of information competence of foreign medical students in the educational environment of the university is specified in the following tasks:

stimulation of motivation of students for mastering information competence;

- developing their sustainable interest and need to work with information;

 formation of students' knowledge and skills to work properly with information of various kinds in formulating current goals in the learning process and their successful achievement;

- encouraging future physicians to master the values related to information competence;

 formation of personal qualities that are part of the information competence of the person in the students-foreigners;

– diagnosing the results obtained and comparing them with the planned result, if necessary, making the necessary correction in the implementation of the process.

368

Thus, the predictive-targetive block of the author's didactic system reflects a certain social demand for training highly qualified medical professionals who have a high level of information competence. It is to provide the unity of the purpose of the designated didactic system and the corresponding tasks. It should be noted that the characterized block, playing a leading role in the further development of the didactic system of formation of information competence of foreign medical students, largely determines the content of the components of its other blocks.

4.2.2 Conceptual and methodological unit

Conceptual and motivational unit of the didactic system of formation of information competence of students of medical specialties is based primarily on the conceptual statements of the research, which are given in the previous sections of the scientific work. As defined in the process of scientific research, the methodological basis for the formation of information competence of medical students in the educational environment of the university a set of methodological approaches are selected:

- system-synergistic (involves taking into account the existing relationships and regular relationships between the structural components of the system of formation of information competence of students, in particular, each student as an open living system, as being in a state of active self-development);

competence-oriented (mobilizes participants in the educational process to master information competence);

 personality and activity-oriented (emphasizes that the formation of information competence occurs in the process of active conscious educational activity of medical students as autonomous subjects and unique personalities);

 hermeneutic (provides the ability of students to adequately interpret and interpret various author's texts in the broad sense of the term, taking into account their spatio-temporal limitation);

- contextual (requires professional training of future physicians through the systematic use of professional context, gradual saturation of the educational process with elements of professional activity);

 culture-based (manifested in the consideration of the problem under study through the prism of different cultures, each of which is a specific structure and corresponding systemic characteristics);

- axiological (encourages students to realize the self-worth of each individual and the importance of information competence in its self-realization).

As defined in the study, the designed didactic system of formation of information competence of foreign students of medical specialties performs a number of such important functions: motivational, adaptive, normative, valueoriented, informational, educational, prognostic, methodical, communicative, technological, interactive. Let's look at them in more detail.

1. *Motivational*. The driving factor for the activity of the individual, which encourages him to perform certain activities, to master it, to achieve the desired results, is the motive. Therefore, the motivational function of the didactic system is aimed at forming in international medical students the respective needs, motives, interests, values, which provide them with awareness of their personal importance of information competence and encourage them to master it.

2. *Adaptive*. The essence of this function of this system is that it provides for the adaptation of students to a new type of information educational environment and involves preparing them for life in accordance with the challenges of the information-digital society.

3. *Regulatory*. Provides orientation of participants in the educational process to the need to acquire knowledge, skills, competences, including

information related to the work with information, defined in the legal documents, in particular in the strategy of development of medical education in Ukraine, standards of higher and professional higher education, as well as recommendations of the World Federation of Medical Education. Formation of information competence in students is manifested in the readiness and ability to use the acquired normatively defined knowledge, skills and skills in solving practical problems in the respective spheres of life, which satisfies the personal and social needs of medical students.

4. *Value-oriented*. This function is intended to identify socially significant values that should be internalized by foreign medical students and to generate a strong interest and need for information.

5. *Informative*. The essence of the information function of the pedagogical system is to form a stable interest and the need to work with information, its exchange. The information function allows you to find out the effectiveness of the educational process, get information about the status of the object and provide productive feedback.

6. *Educational.* This function of the system is related to providing students with the ability to formulate and achieve current goals in the course of all learning, to obtain the necessary prompt information about the state of this process and its results in order to analyze and determine the plan of further actions.

7. *Prognostic*. This function is intended to determine the strategies for the development of the didactic system to make reasonable assumptions about possible changes in the state of the object, to achieve a specific goal, to predict the personal professional development of each student and the level of his or her academic achievement.

8. *Methodical.* The essence of the methodical function is manifested in the definition and implementation of the necessary educational and methodological support for the implementation of the didactic system of formation of information competence of foreign medical specialists and involves the organization of an appropriate educational environment.

9. *Communicative*. This function of the system is connected with the organization of effective communication between all participants of the educational process, contact interaction with people, with the professional environment, establishment of emotional contact with communication partners, ability to develop and maintain such interaction.

10. *Technological*. This function of the system involves taking into account the possibilities of modern educational information-communicative and digital technologies and their active use in the process of learning in the educational environment, as well as ensuring students' readiness for the further use of these technologies in professional activity.

11. *Interactive*. The essence of the interactive function is to provide a high level of interactive interaction for all subjects of the educational process, the systematic use of modern information and digital technologies and various interactive teaching methods in the created information and educational environment of the university.

12. *Control and correction*. This function of the system involves the involvement of foreign students in the self-diagnosis of information competence, as well as the necessary and timely changes in this process.

Let us clarify that all defined and characterized functions of the pedagogical system of formation of information competence of foreign medical students are closely connected and fully consistent with each other. The conducted scientific search gives grounds to claim that the realization of the purpose, namely - ensuring the formation of information competence of foreign students of medical specialties, it is important to consider the properties of information competence as a personal phenomenon, such as: dualism, relativity, multifunctionality, selectivity, cumulativeness, self-organization.

Let's look at them in more detail. With regard to the first definite property - dualism, it should be noted that it is the presence of objective (external) and subjective (internal) self-assessment of the formation of one's own information competence by the individual, that is, involves the implementation of an assessment procedure on both sides. As it is known, knowledge and knowledge bases are quickly obsolete today, so it is advisable to use them in a certain conditional period of time. This property is distinguished as relativity. The essence of the next property of information competence - structuredness - is that each person has his own knowledge bases, which are structured in their own way. Selectiveness indicates that not all the information received by the subject is transformed into his knowledge. However, the acquired knowledge tends to accumulate, over time they become wider, more thorough, more complete, which is reflected in such a property as cumulativeness. Self-organization is manifested as a process of involuntary emergence in unbalanced systems of new structures of knowledge bases. With regard to multifunctionality, this property of information competence implies the presence of various subject-specific knowledge bases [22; 64; 65; 69; 120; 214; 215; 227].

As noted in the scientific literature, the implementation of each system, regardless of its type and components, implies adherence to certain principles of learning, both general and specific. Let us clarify that the principles (from Latin. Principium - the beginning, the basis) of learning derive from the objective pedagogical laws and laws of learning and are determined by the goals and objectives of this process and are "the basic starting points of any scientific system, theory, ideological direction, etc" [6; 86; 143; 171; 193; 221]. According to the views of M. Bondarev and A. Trach, the principles of teaching are understood as the normative provisions that should be used in the educational process. After all, they make it possible to successfully resolve the question of what content of education to select and what materials and techniques to use in mixed learning of students [21, p.43].

In determining the principles of forming the information competence of foreign medical education students, we relied on the findings of scientists who have explored various aspects of the problem outlined for our research. Thus, A. Tkachov defined the following principles of formation of key competences of the subjects of learning:

the principle of scientific (ensuring the conformity of the educational process with the organization and content of the latest scientific achievement);

 the principle of taking into account age and individual characteristics (formation of key competences based on high individual abilities of students);

- the principle of practical orientation of training (involvement of capable students in different types of pedagogically expedient active educational and cognitive activity, shifting the emphasis in the educational process to increase the amount of information intended for learning, to form the ability of the students to independently obtain, process and use it in practice);

- the principle of differentiation of learning (differentiated realization of training on different grounds);

- the principle of optimal combination of pedagogical leadership with the initiative and amateur activity of students (gradual change of roles of teacher and students);

- the principle of ensuring objective diagnosis of educational achievements (requires the use of not traditional subject matter, but complex criteria, which allow to determine the level of formation of key competences of students) [213, p. 325-326].

The conclusions of N. Zhuravleva and L. Shkerina on the definition of the following basic principles of formation of key competences in the applicants of education were also used:

expediency (the formation of key competences in the personality should not be detrimental to its major training);

 consistency (mastering these competences by the students involves the consistent mastery of each competence component according to its composition);

 continuity (formation of key competences should occur throughout the life of students in the educational establishment);

integrativeness (ensuring the mastery of key competences by the subjects of training should include the allocation of existing integrative links between these competences);

- awareness and activity (mastering key competences requires purposeful and active involvement in this process of the individual, as well as providing a conscious understanding of her that these competences will really be needed in her later life) [63, p. 32].

In her scientific work, S. Dotsenko distinguished the following didactic principles: continuity and prospectiveness, consistency and systematicity, fusionism, applied orientation, clarity, co-creation, learning activity, novelty [54, p. 260-269].

In the study of N. Zhitenova, devoted to the problem of the use of technologies and means of visualization in the subject-professional activity of the specialist, the author distinguishes the following general principles of teaching: clarity, accessibility, consciousness and activity, strength of learning, scientific, principle of systematic and consistent learning, communication with practice [61; p. 203-206]. In addition to the above principles, the following specific principles of learning are also highlighted by the scientist: innovation and proactiveness, aesthetics and orientation to cloud services [61, p. 207-208].

The scientific views of T. Sobchenko, who singled out and characterized the general and specific principles of blended learning of students-philologists,

also became useful. In particular, the author highlights the following general principles:

- integrity, systematicity and consistency;

accessibility;

– individualization;

– clarity;

– strength of learning;

- scientific-orientation;

the optimal combination of different methods of teaching students
[193, p. 336-337].

In addition, T. Sobchenko defines the following specific principles of blended learning of students for philological profile:

 interactivity (organization of the educational environment through the use of various interactive methods and teaching aids to ensure the activity of students and to form in them a positive attitude to the information provided);

flexibility and adaptability (completing the learning tasks at the optimum pace for the student, at a convenient time, anywhere according to his individual needs and capabilities);

professional orientation (acquisition of relevant professional competences by students);

structure-orientation (creation of educational content, which should logically combine all its semantic components);

providing effective direct connection and feedback (creating feedback sites, ie "triangle of communication" teacher - applicant - computer);

orientation to cloud services, active use of ICT in the learning process (taking into account the current state of development of ICT and digital technologies in education);

376

- joint activities of the facilitator teacher (teacher-tutor) and students (changing the roles of the teacher and students who manifest themselves as an instructor, expert, organizer, etc.) [193, p. 348-349].

Some interest in the research was aroused by the scientific views of M. Bondarev and A. Trach, who distinguished the following principles of training:

 orientation to specific students (taking into account the personal and age characteristics of students, as well as the direction of their professional training);

– motivation of student learning, stimulating the development of a positive attitude towards this process (the success of the educational activities of its subjects depends to a large extent on the level of their interest in mastering new knowledge and skills in the study of certain educational disciplines);

- priority of self-study (independent activity of students, being an important type of their educational activity, involves not only the implementation of different types of independent work, but also the independent organization of the process of their learning within the framework of studying specific training courses);

– joint activities of the teacher-tutor and students (planning, organization, implementation of the educational process, evaluation of its results and, if necessary, correction); individualization of training (provides for the possibility of creating an individual educational trajectory of the applicant in accordance with the direction and profile of his professional training, focused on meeting his specific educational needs and achieving individual learning goals based on taking into account current educational achievements, psychophysiological and cognitive characteristics of the individual);

updating the learning outcomes (involves the application in practice within the various training courses acquired by students in the process of learning knowledge, skills, qualities, etc.);

 awareness of learning (awareness, comprehension by all participants of the educational process of their actions regarding its organization and implementation);

 professional orientation of training (in the context of the future profession allows to form and improve the professional competences of a specialist to a level sufficient for effective professional activity);

– necessary and sufficient fundamentalization of vocational training (related to the tendency of fundamentalization of education in general, which directs learning to understand and use the essential system-forming links between different processes of the outside world and, accordingly, crosscurricular links);

- autonomy of learning (achievement of the student's goals);

flexibility of training (individual pace of work, way of teaching material, optimal management of the learning process);

interactivity (involves the organization of effective feedback and the use of an active form of interaction of the subjects of the educational process both within the classroom and in the process of independent study of the course materials);

– expediency (determines the importance of rationalization of students' learning activities, activation of their independent work, achievement of educational goals in the most productive way, facilitating the work of the teacher, reducing the time of study only if it allows to increase the efficiency of this process);

- convenience (due to the requirement of comfortable interaction of the subjects of the educational process with the help of such elements of the

educational system as the educational portal, network resources, training modules, etc.);

- adequate distribution of educational activities (combination of elements of independent, distance (online) training and classroom, which meets the goals and objectives of the course);

- permanent support for the student's independent educational activity (involves the organization of active interaction of students and the teacher throughout the study on the educational portal of the university or in the educational social network);

- the integrity of the educational environment (requires a systematic combination of all components of the learning system, including learning tools that perform various functions, such as: electronic / printed textbook, mobile application, student portfolio, additional network resources, control materials, etc.);

multimodal presentation of educational information (involves active use both within the framework of self-study and in the classroom lessons of educational materials of different modality according to the logic and features of the course);

- ensuring the autonomy of students 'educational activities (related to the important role of students' independent work in modern education, implies that they can take over their educational activities, implement its assessment and adjustment, as well as capable of independently obtaining, processing and interpreting information, critically comprehending it);

- elective learning (consists in the application of elements of asynchronous learning, when students are given a certain freedom to choose the content, forms, methods, sources, means, time, place of study) [21, p. 43-48].

As it was found out, O. Spirin, while studying the problem of formation of information-communication and informative competence of students,

expressed his opinion on the choice of the optimal system of didactic principles [117; 197; 198; 199; 200; 201]. In particular, the author distinguishes such principles as: organization of training, selection of content of educational material, differentiation and individualization of learning, strength of knowledge, principle of intellectual skills of mental work, professional skills, principle of relevance of professional knowledge and skills, principle of providing creative independence and activity of students, principle of profitability in learning, methods, teaching aids, the principle of combining the individual and the collective [61; 197; 200].

We also consider the thorough scientific works of the researcher O. Mokroguz, which studies the problem of using multimedia tools, which include information and communication technologies in the educational environment, which are important for the study of the problem of research. In particular, this researcher has identified the following general principles of the use of multimedia tools in the educational process:

- scientific orientation (providing enrichment of educational material with modern fundamental provisions on information technologies of training, as well as their active use in this process, in particular for the formation of scientific concepts in the students);

conscious attitude to learning (awareness of all participants in the educational process of learning goals and objectives based on widespread use of ICT);

- creative activity (selection of independent, creative, problematic and search tasks); accessibility, taking into account the age characteristics of students (transition from the principle of general accessibility to the principle of individual accessibility of training for each applicant with active assistance and control by the teacher);

complexity of the educational flow of information (choice of the optimal pace of training of the applicant);

clarity (disclosing the essential connections of the object, visualizing those knowledge that requires higher degrees of abstraction);

 systematicity and consistency (organizing the submission and assimilation of new educational material by students through the implementation of systematic actions of all participants in the educational process);

- communications or cognitive communication (organization of communication between the computer and the student) [129, p. 37-39].

With regard to the specific princes of the study identified by O. Mokroguz, let us clarify that they are somewhat similar to those of T. Sobchenko's specific principles of blended learning by the author. However, O. Mokroguz supplemented them with such principles as: individualization, systematicity, minimization, aesthetics-orientation [129, p. 61-62].

The point of view of O. Marchenko, who in the study of the problem of forming the educational environment in the institution of higher education, identified the following specific principles of learning: nature-orientation, rational organization, integrity, openness, self-organization, subjectivity, professional context, sectoral self-identification, self-development, self-identification of inner resources in extreme situations [125, p. 236].

In the context of the raised scientific problem, attention should also be drawn to the conclusions of O. Bilyk, who, during the development of the author's system of social and pedagogical support for the socialization of foreign students in the educational and cultural environment of the institution of higher education, distinguished and substantiated the general social and pedagogical (humanistic orientation, integration, harmonization of social and individual), special (informativeness, cultural conformity, social activity and subjectivity, continuity, complexity) and taking into account the specifics of the contingent of foreign students - specific principles (dialogue of cultures and productive intercultural interaction, tolerance) [18, p. 262].

Based on the stated above, it is concluded that the formation of information competence of foreign medical students should be implemented on the basis of taking into account two groups of principles: leading general didactic and specific. Thus, the following principles are included into the first group:

- system-orientation and systematicity (organization of the submission of educational material in a certain order, that is, the logical connection of each new element of its content with the previous and subsequent element, as well as ensuring the systematic assimilation of educational material by the students through the implementation of systematic actions of all participants in the educational process);

- *awareness* (leads to a thorough acquisition of students' knowledge on the basis of awareness of their close connection with practical activities, ensuring the integration of the knowledge, skills acquired in the educational process, skills for successful completion of tasks in quasi-professional and professional activities);

– scientific-orientation (points to the existence of a regular link between scientific information and educational material in different disciplines, and also involves the disclosure of the objectivity of scientific facts, concepts, laws, theories, coverage of modern achievements and prospects for the development of various scientific fields, including medical);

– individualization and differentiation of training (provides consideration of individual characteristics and educational opportunities of each foreign medical student).

The study also identified that the specific principles of forming the information competence of foreign medical seekers within the implementation of the developed didactic system are as follows:

- *professional orientation* (the process of forming the specified competence of the students is closely related to their professional development);

382

– taking into account the mental and cultural characteristics of foreign students (involves taking into account their socio-cultural characteristics: cultural, ethnic, religious, linguistic, as well as cultural traditions, customs, social value orientations, which allows to counteract the communicative barriers that arise in the environment, different cultures);

- activity and interactivity-orientation (encourages students to participate actively in the educational process through the organization of the teacher of an interactive educational environment, in particular through the widespread use of active and interactive methods, teaching aids, which will promote better perception and assimilation of educational material, the formation of their positive attitude to the learning;

- updating the subjective position of the students when working with *information* (aimed at selecting a set of methods, forms, training tools that ensures the transformation of the future specialist into an autonomous subject of information activity).

It should be noted that the characteristic conceptual and technological block plays an important role in the further development of the didactic system of formation of information competence of foreign students of medical specialties in the educational environment of the university.

4.2.3 Theoretical and content-oriented unit

In subsection 4.1 it was determined that *the theoretical* and *contentoriented unit* of the system reflects the structure and content of information competence of foreign medical students.

To clarify the content of the structural components of the information competence of foreign students of medical specialties, the content of regulatory documents was analyzed (Law of Ukraine "On Higher Education" [162], Strategy for the Development of Medical Education [207], Standard of Higher Education of the second (master's) level, branch of knowledge 22 Health care, specialty 222 Medicine [202], etc. as well as the theoretical positions of specialists in the field of medical education.

Thus, earlier it was determined that the motivational and targetive component is associated with the formation of students' interest and need to work with information, motives for mastering information competence.

So, T. Zakusilova emphasizes that motivation is a basic and central element that directs a person to achieve a goal and contributes to the development of personality. In light of this, future medical professionals should be aware of and understand the choice of future professional activity, have formed internal motives for achieving success in the chosen professional field, etc. [70, p. 53].

O. Kovtun notes that in medical education institutions it is important to ensure the formation of internal motivation in future doctors regarding their professional and personal becoming, development of students' sustainable interest in the chosen specialty based on social motives [89, p. 89, 90]. A similar opinion is expressed by Y. Ostraus, who emphasizes that considerable attention in the process of teaching students in a medical education institution should be paid to the development of their motives for mastering professionally significant knowledge and skills, as well as relevant professional and personal qualities [151, p. 134]. According to the conclusions of O. Isaeva, future doctors should develop the need for the assimilation of the necessary professional knowledge and skills and the desire to help other people, primarily to their patients [79, p. 140].

N. Khodotova in her scientific work focuses on the fact that the motivation of students of medical universities is quite difficult to maintain for a long time, but this is a necessity in higher medical education institutions. An interesting conclusion of the scientist is that for the medical industry it is of great importance to identify "random persons" among students as soon as

possible [226, pp. 146-147]. O. Solodovnik notes that future doctors should have a conviction in the need to carry out constant professional and personal self-improvement [194, p. 116].

Valuable in the context of the problem raised were the theoretical provisions of Y. Ilyasova, who emphasizes the importance of forming the motivation of medical students for professional activity; developing in them the desire to become a professional in the field of medicine, to achieve a high level in the professional career of a physician, to carry out constant self-development, self-improvement and self-realization through educational, vocational and professional activities; to the learning process, the content of professional disciplines, as well as to medicine and the medical profession in general; formation of a positive attitude towards the chosen specialty [77, p. 72, 73].

Of particular interest in the context of the initiated research were the scientific views of V. Svyrydyuk, according to which, during the formation of information and communicative competence of medical students, it is necessary to ensure their awareness that this competence is an important component of the integral professional competence of medical workers, to form in them the desire to master this competence as within the framework of the development of their professional and educational motivation, as well as motivation for future professional activity. The scientist also emphasizes that in future doctors it is important to develop motivation for the active use of modern innovative, information technologies, the need for the manifestation of cognitive independence, the desire to actively engage in scientific activities in the field of their professional activities based on the use of these technologies [178, p. 114-116].

L. Nazarenko and I. Melnychuk quite rightly point out that motivation is one of the mandatory components of the competence of future doctors. After all, the success of their future professional activity largely depends on their desire to obtain the proper level of professional training, to work constantly on their own

self-improvement and professional development. In addition, it is important for medical students to form a motive and achieve their goals, as well as the desire to set and achieve optimal goals of activity [136, p. 41].

So, on the basis of the foregoing, it can be summed up that the motivational and targetive component of the information competence of foreign students of medical specialties provides for:

- their interest and need to work with various types of educational and professionally oriented information;

 awareness of the essential role of information competence in educational and professional activities, the development of motives for mastering information competence and its continuous improvement;

– formation of motivation among students for higher medical education to set a sequence of goals on the way to mastering information competence, the manifestation of the ability to formulate and achieve these goals.

It should be clarified that the personalized goals of students should be fully consistent with the main learning objectives of applicants for higher medical education, defined in the Standard of Higher Education of the second (master's) level, field of knowledge (22 Health care), specialty (222 Medicine), namely as follows:

acquisition of the ability to solve complex problems and problems,
including research and innovation, in the field of medicine;

- ensuring the ability to continue learning with a high degree of autonomy [202, p. 7].

As noted in the previous text, the *cognitive and activity-oriented component* of the information competence of students certifies the formation of their knowledge and skills necessary for working with information (information-analytical, constructive and projective, organizational and communicative, reflexive and evaluative).

Thus, in the Standard of Higher Education of the second (master's) level, the field of knowledge (22 Health care), specialty (222 Medicine) it is noted that the objects of training medicine and medical activity are prevention, diagnosis and treatment of human diseases, the impact of health problems on patients, their families and population, maintaining health, principles and theories of prevention, diagnosis and treatment of human diseases at the individual and population levels [202, p. 7].

In accordance with the normative content of the training of applicants for higher education, formulated in terms of the results of students in the specified standard, students must have a thorough knowledge of the structure of professional activity, understand and assimilate knowledge of fundamental and clinical biomedical sciences at a level sufficient to solve professional problems, as well as master specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research [202, p. 11].

According to V. Svyrydyuk, in the totality of knowledge included in the structure of information and communicative competence of future doctors, the following places are occupied by the following:

- form the basis for research methodology;

 knowledge of the basic methods of searching for modern information sources on selected research problems;

knowledge of the essence of the concept of "relevance of sources of scientific information", knowledge of the essence of the concept of "pertinence of information sources" [178, c. 151].

O. Kovtun believes that future doctors should first of all learn the professional and socially oriented knowledge they need to work, as well as freely operate with the basic medical terms necessary to perform tasks of a professional, cultural and ideological nature [89, p. 139].

Y. Ilyasova argues that future doctors should learn in the educational institution an integrated system of professional knowledge necessary for future professional activity that include knowledge of the features of the clinic, diagnosis, etiology, treatment, preventive work and prognosis of the most common diseases; knowledge of the age and individual characteristics of patients and the importance of taking into account these features in professional medical activities; knowledge about the features of business communication of a physician and his interaction with patients [77, c. 74]

V. Svyrydyuk considers that students of medical specialties should know:

- the essence and basis of information and communicative competence of a physician;

- conceptual apparatus of this competence;

medical terminology, as well as the basic concepts necessary for research activities, including: "scientometrics", "Hirsch index", "impact factor", "international scientometric database", "cloud technologies" etc.;

 basic approaches to the organization of scientific research in medicine based on the use of the above technologies;

rules for the use of international scientometric bases, containing databases of open and closed access, as well as their cloud services in science and education;

- the content and specifics of the application of the method of computer modeling in medical science and education;

- features of various typical information and communicative situations that often arise during the presentation of intellectual property objects at scientific forums, and requirements for scientific publications for their placement in scientometric databases [178, p. 65-58].

M. Bichko emphasizes that future doctors should master not only professional knowledge, but also knowledge from other academic disciplines

(physics, biology, anatomy, psychology, etc.), which are professionally necessary for these specialists. in particular, about modern medical equipment used for diagnostics (stadiometer, scales, stethophonendoscope, tonometer, thermometer, etc.), therapy (a set of medical devices and medicines for emergency medical care), clinical laboratory tests (spirometer, glucometer, microscope, etc.), etc. [17, p. 8].

Native scientists (I. Levenok, I. Melnychuk, O. Yatsyshyna, etc.) also draw attention to the fact that foreign students must master medical terminology in at least two languages (Ukrainian and English), because without this they will not be able to become qualified physicians [113; 234]. It is also worth noting that, according to N. Avramenko, future foreign doctors, in order to master professional terminology, must learn the system of knowledge about: the norms of the modern Ukrainian (or English) language (morphological, orthoepic, syntactic, lexical, stylistic, etc.), speech means (intralingual and extralingual), communicative strategies and tactics of professional behavior of the physician; scope and semantic features of professional terminology (primarily medical terms – composites and abbreviations); basic terminology elements and methods of constructing clinical terms; norms of planning and implementation of professional speech and cross-cultural communication, implementation of therapeutic and recommendatory strategies of medical discourse [1, p. 96; 96].

Regulatory documents and scientific literature also emphasize the need to ensure professionally necessary skills in the process of professional training of future doctors of different groups. In particular, during the development of the didactic system for the formation of information competence, the list of mandatory skills given in the Standard of Higher Education of the second (master's) level, the field of knowledge (22 Health care), specialty (222 Medicine) was analyzed. So this document determines that within 6-year period of training students ought to master the following skills:

1. Ability to abstract thinking, analysis and synthesis.

2. Ability to learn and master modern knowledge.

3. Ability to apply knowledge in practical situations.

4. Ability and understanding of the subject area and understanding of professional activities.

5. Ability to adapt and act in a new situation.

6. Ability to make informed decisions.

7. Ability to work in a team.

8. Ability to interpersonal interaction.

9. Ability to communicate in a foreign language.

10. Ability to use information and communication technologies.

11. Ability to search, process and analyze information from various sources.

12. Certainty and perseverance regarding the tasks and responsibilities taken.

13. Awareness of different opportunities and gender issues.

14. Ability to realize their rights and obligations as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and citizen freedoms in Ukraine.

15. Ability to preserve and increase moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, to use various types and forms of physical activity for active recreation and healthy lifestyle [202, p. 8-9].

Obviously, all these abilities of future doctors are largely related to the information competence of a specialist. It should also be noted that many specialists in the field of medical education reveal their own position on what skills future doctors should first of all master.

According to O. Kovtun, students need to form the following important skills: the ability to convincingly explain the need for the necessary medical manipulations, to establish clear feedback with their colleagues to ensure coherence in joint activities with them; ensure effective communication with representatives of various target auditors; to regulate and prevent the occurrence of conflict situations; manage your emotions and statements [89, p. 91, 92].

According to the conclusions of T. Zakusilova, future doctors should master the following skills:

 make independent balanced decisions in extreme situations, carry out all professional types of medical intervention and their correction;

- competently apply innovative types, methods and technologies of treatment;

monitor the patient's health and course of the disease;

– master the technique of carrying out medical procedures and manipulations in their professional field [70, p. 73].

O. Kovtun believes that in the system of professionally important for the future physician skills, the main place is occupied by the following skills: the implementation of the necessary medical procedures, the assessment of the general condition of patients; providing care and monitoring of patients; work with modern technical medical equipment and medical documentation; quick adoption of the optimal decision in non-standard or unexpected clinical situations, competent provision of emergency medical care; rapid adaptation in the existing clinical environment and establishing communicative contact with the patient and his close people [89, p. 74].

We would like to note that in the process of research, the point of view of V. Sviridyuk aroused particular interest, who singled out the skills that are part of the information and communicative competence of future doctors, namely the following skills:

- to plan and implement scientific research, conduct patent information search;

to competently work with international (SCOPUS, Web of Science,
Google scholar) and domestic (Bibliometrics of Ukrainian science)
scientometric databases;

– to substantiate the author's approaches to the organization and conduct of scientific research based on the use of modern information technologies (in particular, to formulate tasks and choose research methods, set an experiment);

- to work and analyze the results of scientific research, to formulate scientifically substantiated conclusions based on the use of computer technology;

 to create author's objects of intellectual property, to predict the ways and methods of their use in professional practical activities;

- to present these objects at scientific forums of various levels;

 to place own intellectual property objects in national and international scientometric databases and create a personal scientometric profile in scientometric databases;

 correctly analyze information about your own scientific rating based on the definition of citation indices and use it to carry out further personal and professional development [178, p. 67, 68].

- The study also took into account the conclusions of N. Avramenko, who considers it necessary to ensure the purposeful formation of foreign doctors necessary for mastering professional terminology skills. It is primarily about:

 ability to manage speech activity, in particular to control their emotional state and speech behavior through the development of moral and volitional qualities and "emotional intelligence";

392

- choose and implement in practice optimal language means in accordance with the purpose, conditions, situation of communication;

- speech abilities necessary for the medical sphere;

quickly navigate in new professional terminology and use it correctly;

 distribute their own speech actions into "steps" based on determining the optimal sequence of application of certain productive ways of solving the set communicative tasks or problem situations, assessing and adjusting dialogic interaction;

optimal use of different types and means of thinking in professional activities;

- quickly move from an abstract (idea) to a specific (professional situation) level of activity;

apply acquired knowledge, possible strategies of behavior in various standard and non-standard situations of professional communication;

 implement meaning-making activities and form their own style of professional and medical communication with all partners in educational or professional communication;

 logically and competently formulate your own thoughts and conduct a discussion on professional topics;

 adequately choose professional terms and generate them into correct statements in terms of language and terminology norms;

- understand and reproduce professional texts and speeches of specialists;

- use modern reference sources of various types;

 determine the specific meaning of each term and its content based on the context of the information received in the form of a printed or oral message;

- create a thesaurus with the essence of the existing problem;

393

- identify logical and lexicological connections between special medical terms and systematize them within a single problem or a single terminological group [1, p. 78, 96].

Based on the foregoing, our own scientific position on the content of the *cognitive and activity-oriented* component of the information competence of foreign students of medical profile was formulated. This component includes:

 awareness of the meaning of information, ways of its search in modern sources, its processing (analysis, systematization, verification of reliability, relevance and pertinence) and broadcasting to other participants of communication;

- awareness of the essence, structure, content of information competence of a physician and its role in his professional and everyday life, ways to improve this competence;

 awareness of medical terminology in English (Ukrainian) and native languages and methods for determining the meaning of each concept using modern sources of information;

- awareness of the basic requirements for a modern physician, his professional duties using modern information and computer technologies;

- awareness of the norms of communication with other people, in particular representatives of different cultures, different segments of the population, patients and their relatives etc. online and off-line;

- awareness of the requirements for research activities, ways to search for modern sources of information on the chosen problem and the algorithm for working with these sources, presenting your own intellectual product to the general public.

In the process of research, it was also concluded that this component includes the following groups of skills:

– information and analytical skills – provide information (search, selection, collection and dissemination of information) and analytical (analysis, systematization, generalization, clarity, transformation of information, formulation based on this conclusion, proposals and forecasts) level of educational, research or professional activity of a specialist;

– constructive projective skills – imply the ability of future doctors to formulate, specify the individual goal of their own educational or professional activities in accordance with their own plan and the existing specific situation, develop a plan to achieve this goal (determine the ways and stages of its achievement of this goal, in light of this design the content of their future activities and the sequence of actions on the use of modern information sources, select methods, forms, means of implementing this goal-oriented activities, to predict possible difficulties in work and deviations from the plan and options for making appropriate adjustments to the activity, etc.);

– organizational and communicative skills – manifested in the ability of a physician to carry out effective direct or indirect communication with other people based on the use of modern information technologies, the ability of a physician to clearly and correctly express his thoughts, taking into account the individual characteristics of the recipient of the message (age, gender, national, speech, age, psychological, etc.) and to establish effective feedback with him, mobilize people to perform set tasks, rationally distribute work between the participants of joint interaction;

– reflexive and evaluative skills – necessary for foreign students to carry out introspection of the level of formation of knowledge, skills, qualities necessary for working with information, and determining ways to further improve them, identifying positive and negative aspects in the process of forming their own information competence and self-control of their educational and professional activities, if necessary, making timely adjustments to its course; personal self-improvement on the basis of taking into account the results
of self-study and introspection of their own knowledge, skills, qualities and properties;

special skills – reflect the specifics of the professional activity of physicians and the need of medical students to perform educational, professional and research activities, taking into account this specificity. This group of skills includes the following: correctly apply medical terminology in different languages (Ukrainian or English, native); be able to diagnose the state of health of patients, identify their diseases and prescribe optimal treatment using modern information technologies and innovative medical equipment; be able to convince patients and their relatives of the need to perform prescribed medical procedures and use prescribed medications; competently organize interaction with their colleagues on the basis of compliance with the rules of medical ethics, timely update their knowledge and skills, improve their professional skills based on the development of the latest information and professional sources; carry out research activities in the field of medicine, present research products to their colleagues in author's scientific publications and reports of scientific and practical conferences and seminars of various levels; skills of life-long education etc.

As it was defined earlier, *the personality and value-oriented component* of the information competence of foreign students of medical specialties certifies the identity of future specialists of personal qualities and values necessary for working with information.

Thus, Y. Ilyasova emphasizes the need to form in future doctors such personal and professionally significant qualities as: humanity, mercy, empathy, patience, kindness, ability to reflect and adequate self-esteem [77, p. 84]. L. Nazarenko, I. Melnychuk believe that a medical worker should master the following personal qualities: observation, responsibility, empathy, balance, benevolence, tolerance, empathy, etc. [136, p. 42].

According to G. Stechak, professionally important qualities for a physician are the following: moral responsibility, civic maturity, social activity, a tendency to the profession, humanity, high demands on oneself and others, sociability, education, competitiveness, independence in making important decisions, responsibility for the results of their own activities, patience, purposefulness, determination, prudence, observation, love of mankind [205, p. 67]. V. Svyrydyuk to professionally important qualities as a component of information and communicative competence of a physician include the following: creativeness, activity, purposefulness, tolerance, observation, assertiveness, etc. [178, p. 151].

It is also worth noting that many specialists in the field of medical education emphasize the importance of forming humanistic professional and personal values in future doctors. According to L. Nazarenko and I. Melnychuk, these values are an important aspect of the competence of a physician, because they determine the value characteristics of the student to the patient and his family, to collaborators, to various professional and everyday situations, as well as the choice of a specific model of specialist behavior when solving complex professional problems [136, p. 42].

As it turned out, scientists express different opinions on the definition of the system of professional and personal values of a physician. So, K. Kurenkova among these values identified the following:

1. Basic professional values that ensure the general orientation of the personality of the specialist. This group is formed by values of a worldview nature that ensure the social orientation of the individual physician (person, health, life, good, etc.).

2. Social and regulatory values that determine the nature of the relationship of the medical worker with patients and their families. This group combines the values that regulate the relationship of the physician with patients

and their relatives (kindness, social maturity, mercy, altruism, humanity, empathy).

3. Collegial and regulatory values governing the relationship of a physician with his colleagues. and their own people with co-workers. The group includes the values governing relations with colleagues (collegiality, goodwill, professional reputation, exactingness).

4. Personal-reflexive values that determine the attitude of the individual to himself as a representative of the medical profession. The author names the following values: love for the medical profession, professional dignity, self-criticism, conscientiousness, etc. [108, pp. 7, 8].

The scientific position of K. Kurenkova is shared by Y. Ostraus. In her scientific work, she identified similar groups of professional and personal values [151, p. 71].

Based on the foregoing and the results of their own teaching activities, it was concluded that the composition of the information competence of foreign students of medical specialties includes the following professional and personal qualities: humanity, social responsibility, honesty, independence, attentiveness, observation. creativity, balance. tolerance. activity, purposefulness, determination, prudence. It was also found out that in the process of studying at the university, foreign students of medical specialties should internalize, first of all, universal human values that acquire special importance for a physician, in particular the following: person, life, health, information, etc. Mastering these values becomes the basis for the formation of a general humanistic orientation of the individual while working with information. In addition, medical students master the following professionally important values: love and respect for people, professional duty, assertiveness, self-development, self-education, optimism, empathy. The assimilation of these values by future medical professionals during their work with information allows us to ensure that the specifics of their future professional activities are taken into account.

Clarification of the content of the structural components of the information competence of foreign students of medical specialties makes it possible to move on to the issue of determining the organizational aspects of its formation in the educational environment of the university.

4.2.4 The activity-oriented and procedural unit

In the process of the research it is concluded that the activity-oriented and procedural block of the author's didactic system contains the stages and pedagogical conditions of formation of information competence of foreign students of medical specialties in the educational environment of the university.

In particular, to determine the stages of formation of the specified competence, the relevant scientific and pedagogical literature was analyzed. Thus, in the process of scientific research, the scientific achievements of T. Gritskaya, which identified the following main stages of formation of information competence of students, became useful:

- familiarization (determining the amount of information and the possibility of its processing);

- reproduction (study and accumulation of an array of information);

transformation (critical comprehension of information, determination of its reliability, generalization);

creativity (creating your own intellectual product based on obtaining information, creating theories, formulating hypotheses and testing them) [45, p. 42].

Modern scholars such as N. Morse and O. Kuzminskaya adhere to the same opinion on the stages of formation of information competence of the recipients of education [133]. According to O. Griban, the formation of information competence of higher education applicants should be carried out in the following stages:

1. motivational-targetive (at this stage the future graduate should be aware of the importance and necessity of using information and computer technologies both in their educational and professional activity).

2. content and activity-oriented (at this stage is to bring the students to automatism solving problems when working with computer technologies, to optimally use knowledge in solving educational and professional problems);

effective-reflexive (this stage involves tracking the dynamics in the formation of qualitative mastery of information and computer technologies) [43;
 44].

N. Lobach's research on the problem of forming information and analytical competence in future physicians was useful. The author defines the following stages:

1. motivational and targetive (encourages future doctors to perform information and analytical competence, and also determines its purpose);

2. operational and activity-oriented (at this stage it is important to perform consistent actions aimed at achieving the goal, solving the tasks, presenting the results of this activity);

3. reflexive and evaluation (involves the analysis and evaluation of the work performed, the result, experience; increasing self-esteem and motivation for further creative activity) [116, p.28].

The stages of the formation of professional and ethical culture in future physicians were also considered, proposed by Yu. Thus, the following stages are distinguished by the scientist:

 propaedeutic (diagnostics of the preliminary level of knowledge in professional ethics and motivation; acquaintance of students with the essence, purpose and components of professional ethics, requirements for professional and ethical culture of physicians);

 basic (development of motivation for moral activity, development of a clear understanding of professional ethics and use of professional and ethical knowledge in practical activity);

- final (diagnostics and monitoring of moral and ethical readiness of students to work in the healthcare system; formation of the need to increase the acquired level of professional and ethical culture, motivation for self-improvement of professional and moral-ethical competence) [92, p.109].

In the context of solving the outlined problem of research, attention is drawn to the scientific conclusions of Y. Ostraus regarding the stages of formation of communicative skills of future future family doctors:

- motivational (provides motivation for the formation of a certain communicative skill);

cognitive (mastering the knowledge necessary to master new skills);

 professional-activity (contains all stages: initial application of knowledge for the purpose of formation of new skills, application of skills in standard conditions, and creative use in non-standard conditions of professional activity);

- evaluation (assessment and self-assessment of communicative activity and the formation of a certain communicative skill) [151, p.200].

Thus, taking into account the above conclusions and the advice of specialists, it is concluded that the process of formation of information competence of foreign medical specialists should take place in the following stages:

- organizational and mobilizing;
- resultative and procedural;
- control and correction.

As determined in the study, at the first (organizational and mobilizing) stage of formation of information competence of foreign medical students, it is

envisaged to create effective educational and methodological support of this process, as well as stimulate the development of motives for the mastery of information competence. At this stage, it is envisaged to use various effective methods, forms, tools, technologies of training that provide the educational needs of each educational recipient, forming his educational trajectory. Among these methods it is advisable to use such as:

- verbal, visual, practical;

- active and interactive methods, in particular: problematic lectures (consideration of the problem, analysis and search for ways to solve it); binary lectures (forming discussions to stimulate and develop students' cognitive interest, accumulate experience of mental activity); lectures with planned errors (incentives to control the receipt of information); multimedia presentations, scribing, podcasts, educational video materials, fragments of documentary and feature films;

– practical tasks and exercises, webinars, virtual worlds and more.

As defined in the study, at this stage it is recommended to use the following forms of training: mass, group and individual; discussions and debates; staging; trainings; didactic, business and role-playing games and more. Concerning training tools should be mentioned such as:

- simple (verbal and visual) - textbooks, manuals, printed materials, paintings, etc.;

complex - audio, video, audiovisual tools that automate the learning process, mental cards;

multimedia traditional (print, periodicals, sound recordings, television) and electronic (mobile phones, gadgets, computers, Internet, videos, etc.).

In addition, the following information educational technologies will be used at this stage: Linoit, Kahoot!, Internet Cafe, Open Space, Jigsaw, Zigzag and more.

The second (resultative and procedural) stage is aimed at the formation of foreign knowledge, skills, personal qualities, values as components of information competence in foreign students. This stage involves the widespread use of the following teaching methods: interactive lectures, conferences, discussion of problematic situations, work with art, educational, scientific, reference literature in traditional and remote format, mentoring, "world cafe", various method, method. synchronous, forms, project case voice communication) and asynchronous (multimedia, networking, support, etc.) teaching methods, task-based methods (TBL), evidence-based learning (EBL), problem-based learning (PBL). Basic forms of training are the following: lectures, seminars and practical classes, conferences, webinars, video conferences, consultations, excursions, laboratory work, independent work, web quests, workshops, internships and more.

Such forms of training are in demand, which ensure the interactive nature of the interaction of participants in the educational process and contribute to the intensity of mastering the content of education: intellectual game, role-playing, debate, discussion, seminar, training, teamwork, master class, heuristic conversation, quests and more. The main means of training, in addition to traditional (simple and complex), should be the following:

 hardware (computer, smart-board, 3D Anatomy table, simulative multimedia projector, mouse manipulator, keyboard, video player, audio player, video and audio recording devices, speakers;

- software (programs for creating and editing presentations, multimedia Video editors, image editors, audio editors, programs for the implementation of hypertext, located locally or online, online platforms for creating blogs and websites, posting educational content, podcasts;

professionally-oriented information bases (Amboss, Cochran library etc), Computer-based virtual environment etc.).

In addition, it is advisable to use the following training tools: mobile content learning tools (mobile textbooks, testing, dictionaries, translators, e-textbooks and books); mobile communication tools, simulators, and more. Regarding educational technologies, it is necessary to distinguish such as: cooperative training, technology of research training, cooperation technologies, discussion technologies of training, imitation and game, modular as open, technology of participation, web quests (web rooms), technologies: "Zigzag", "Open space", "Jigsaw", project activity and various types of projects are carried out using modern free online services and platforms Miro, Padlet, Trello, EDPUZZLE, CLASTIME and more.

The third (control and correction) stage is connected with determining the level of formation of information competence in foreign students of medical profile, and if necessary - making the necessary changes in the process of its formation. At this stage, the following methods of teaching, questioning, testing, questioning, interviews are effective. It is envisaged to use the following forms of organization of work of students: performance of educational tasks, credit and control works, work with a simulator robot, creation of portfolio in printed and electronic forms, making case histories, writing a coursework, passing exams (first of all exams, conducted by the Testing Center at the Ministry of Health of Ukraine since 1999). Concerning the control of students' educational achievements and the formation of information competence in them, the following tools will be used: mobile knowledge control tools, electronic test aids and knowledge control programs, mobile applications, interactive whiteboard. It should also be noted that the following information technologies are envisaged at this stage: online testing of Socrative, Kahoot!, CLASSTIME, Google forms, Google tests and more.

Let us clarify that in the previous section it is determined that any didactic system has a successful functioning only under the appropriate pedagogical conditions, the variant of which are psychological-pedagogical, organizationaldidactic, etc. It should be noted that the identification of such specific conditions will belong to the totality of not only external but also internal circumstances, which largely determine the effectiveness of the course of the educational process and the possibility of achieving its expected results. In the light of this, before moving on to this task, we consider it advisable to clarify the definition of individual scientific and terminological concepts. So, this concept "conditions" in the reference literature is interpreted as:

factor, factor, driving force of any process, events, phenomena [29, p. 1526];

a circumstance on which something depends [29, p. 1506]; the objective features of reality that something is happening or is happening [29, p. 1506];

- the environment in which certain processes, events, phenomena occur and function [102, p. 326];

- the totality of certain things, relationships, processes that are necessary for the emergence, functioning, development of a particular object [222, p. 286].

It should be noted that V. Polonsky defines the term "condition" as a set of variables of natural, social, external or internal factors, circumstances that determine the course of a holistic pedagogical process, physical, moral, mental development of personality, its communication and behavior, personality formation [159; 168]. In other scientific and pedagogical sources the concept of "condition" is interpreted as a set of certain facts, circumstances, influences, processes that allow to manage the educational and creative process, which results in the formation of personality [41, p.135-136].

In the course of the research, special attention was paid to defining the concept of "pedagogical conditions", since it is complex and ambiguous. It should be noted that there are some differences in its interpretation by scientists. Thus, the famous scientist Yu. Babansky understood the concept of "pedagogical conditions" as pedagogical circumstances that either contribute or counteract the manifestations of certain pedagogical patterns [6, p. 80]. In particular, in the process of research it is established that the concept of "pedagogical conditions" is considered by researchers as:

- a set of objective opportunities, content, forms, methods, pedagogical techniques that ensure the efficiency of the educational process and the successful solution of the pedagogical tasks set [182, p. 40];

a system that constitutes certain norms, situations, methods that are necessary to solve a specific pedagogical task or achieve a specific goal [156, p. 183];

- a set of interrelated internal and external parameters, characteristics of the functioning of the pedagogical system, which ensures the efficiency and effectiveness of the educational process and meets the requirements of optimality [124, p. 153-161];

- peculiarities of the organization of the educational process, which determine the results of education, education and development of the student's personality, objectively provide the opportunity to achieve them [56, p.136];

- factors (circumstances) that significantly influence the achievement of the pedagogical goal, the course of the educational process, the formation and development of specific pedagogical phenomena, events, processes, systems, the effectiveness of the pedagogical system as a whole [24; 102; 131; 144; 190];

- a set of measures aimed at achieving the goals that interact and complement each other, which prevents them from penetrating sudden and episodic, which will not contribute to the desired efficiency [126, p 116];

- organizational forms, content of education, methods and means of teaching, as well as other components of the pedagogical process, which act as one or the totality of its equal parts [218, p. 195];

 conditions that are deliberately created in the pedagogical process and ensure its effective course [82, p.38-39];

- components of the pedagogical system, reflecting the totality of the educational and material-spatial environment, as well as affecting the personal and procedural aspects of the system, ensuring its effective functioning and development [74, p.10-11];

characterization of the pedagogical environment; circumstances necessary for the course of the pedagogical process; factors, ways, directions, forms, methods, techniques and predictable results of the pedagogical process [146; 209];

- a set of pedagogical activities that provide updating of the content of training, the use of the latest techniques and technologies [206, p. 39-40].

The analysis of scientific and pedagogical sources has made it possible to state that pedagogical conditions depending on the peculiarities of influence on the educational process are divided into external and internal. In particular, external pedagogical conditions reflect:

peculiarities of influence of political, socio-economic processes, society;

a system of relationships between the subjects of the educational process;

- place of pedagogical interaction, psycho-emotional atmosphere of the educational institution, etc. [144; 59].

Internal pedagogical conditions include: peculiarities of organization of a specific pedagogical process and individual, personal characteristics of students.

Regarding the types of pedagogical conditions, let us clarify that scientists distinguish such as: didactic, psychological-pedagogical, methodical and organizational-pedagogical [44; 82; 110; 138; 156].

Thus, in the context of the study, we consider it necessary to express our own point of view on determining the essence of pedagogical conditions that ensure the effectiveness of the process of formation of information competence of future foreign students of medical specialties in the educational environment of the university. It is concluded that these pedagogical conditions are a set of objective opportunities of the educational environment of the university, which ensure the creation of a purposeful process of increasing the efficiency of formation of information competence of foreign students of medical specialties. In particular, in order to clarify these conditions, the scientific works of scientists who studied the problem related to us were elaborated. Of considerable interest in this context are the studies of G. Tkachuk, T. Sobchenko, Y. Kapustin, who determined the pedagogical conditions, taking into account the main factors and factors that influence the formation of competences in the students in the organization of the educational process, which is carried out in a mixed form.

Thus, G. Tkachuk distinguished the following conditions:

ensuring the solution of problems with technical, programmatic,
 educational-methodical, personnel, regulatory and legal filling, improvement of
 electronic, distance, mobile training facilities;

formation of appropriate readiness of participants of the educational process for the implementation of blended learning (regarding pedagogical staff
 creation of opportunities for improving their qualification in the field of blended learning, effective use of information and communication technologies, implementation of online learning, students - formation of a positive attitude to the introduction of new technologies, construction of the learning process in the modern format [218, pp.259-260].

T. Sobchenko identified organizational and didactic conditions that ensure the effective implementation of blended student learning, such as:

- creation of a combined educational environment;

 provision of special training of teachers for the implementation of mixed training of applicants for higher philological education;

- combination of monitoring and self-monitoring of students' educational achievements by means of blended learning [193, p. 396].

Yu. Kapustin defined the organizational and pedagogical conditions for the implementation of blended learning of students of universities of technical profile, which include:

- structural approach to the content of educational material;

technological and substantive flexibility of the educational process
 (the ability of all participants in the educational process to be able to adapt
 quickly to scientific, technological and socio-economic changes);

- creation of a model of logical semantics;

- continuity of retraining of pedagogical and teaching staff;

 comprehensive application of computer technology, global telecommunications networks, electronic expert systems, information and communication technologies;

 structuring the stages of training specialists on the principle of "completed part", each of which has its own meaning;

- use of common for full-time and distance learning relative indicators that reflect students' achievement in learning (rating system of quality management training of future specialists); - combination of collective and individual approaches in the construction of the trajectory of development of the educational environment [80, p. 26; 193, p. 359].

A. Zavyalov in his research the most important pedagogical conditions of formation of information competence of future specialists considers the following:

1. defining in the content of education a system-forming idea, which determines the cross-curricular links between the disciplines of the curriculum,

2. the selection of the content of disciplines, taking into account the criteria, systematic regulations of activities that combine a set of orientation bases of activity of different types [66, p.13].

Also, the findings of scientists N. Balovsyak, O. Krylova and others regarding the definition of requirements for pedagogical conditions are considered, in particular, such as:

– systemic character;

clearly defined structure, specific purpose, objectives, means, methods and organizational forms of activity;

having a network of active connections between all components of this structure;

- taking into account the personal, individual characteristics of all participants in the educational process [12; 104].

In order to identify the conditions for the formation of information competence of foreign medical students we also relied on the findings of scientists who explored close aspects of the outlined pedagogical problem. In particular, N. Lobach defined the following pedagogical conditions for the formation of information and digital competence of future doctors in the educational environment of a higher medical institution of higher education:

 formation of motivation for information and analytical activity in future doctors as a means of professional development and career growth;

- gradual implementation of information and analytical activities from algorithmic to application in non-standard situations;

410

- creation of an open educational environment of higher education institution of medical education [116, p.7].

I. Volodko identified and substantiated the following pedagogical conditions for the formation of information and digital competence of future specialists:

development and testing of multimedia didactic teaching aids in the relevant discipline;

- taking into account the didactic capabilities of multimedia technologies as a means of activating the educational and cognitive process;

- variety of multimedia forms and methods;

special training of the teacher for the use of multimedia technologies
 [33; P.167].

L. Dobrova identified the following three pedagogical conditions for the effective formation of information competence of students of technical higher education:

- use of a multilevel approach to mastering a system of special competences;

- organization of information activities in the situation of choosing a rational style;

- organization of information learning activities through awareness of self-control actions [50; 51].

Also, the pedagogical conditions for the formation of information and communication competence of future family doctors in vocational training were identified, which the author considers as specially created circumstances that involve the introduction of innovative methodological and pedagogical measures in the educational process of the institution of higher medical education, which meets the requirements of Ukraine. Information and communication competence of future family doctors [146, p.80].

The scientist in the study substantiated and tested the following pedagogical conditions:

integration of knowledge in the humanities and professional disciplines on information and communication interaction of future family doctors;

 saturation of the educational process with interactive teaching methods aimed at mastering information and communication skills; Updating the experience of professional communication of future doctors in extracurricular activities.

Thus, in determining the first pedagogical condition on the basis of theoretical generalizations and recommendations of scientists (G. Tkachuk, T. Sobchenko, Y. Kapustin), it was concluded that the effectiveness of forming the information competence of students depends largely on the formation of teachers' competence in organizing and implementing this process. It should be noted that the organization of the educational process in the modern information environment, in particular in a mixed form, as well as the wide 14 use of information technologies, causes a change in the role and functions of the teacher. In particular, the plan deserves the findings of scientists (A. Pashkova, G. Kozlakova, V. Kukharenko, N. Morse, etc.), which distinguish such a number of functions of a teacher of a higher education institution:

 design of modern technologies, forms, teaching methods, content of educational material, system of diagnostic and forming means;

- development of an educational information-digital environment for the study of each academic discipline;

- organization of group and individual work of university students in the information-digital educational environment;

communication in training, including networking;

412

 providing individual or group educational and professional reflection of participants, discussing the successful experience they have accumulated in this regard;

- promoting the formation of information competence of students, developing critical thinking in the process of finding, collecting and analyzing information in the information-digital environment [91, c. 92-94; 153, c. 33].

The introduction into the field of education of new information technologies also necessitates the need to update the content of the teacher's willingness to transmit their knowledge and experience to the students at the theoretical and practical levels. As O. Korchazhkin rightly points out, the teacher ceases to be the only source of information for the students, since he must organize the learning process in such a way as to transform the traditional educational environment into a high-tech, modern one, which meets the requirements of the information society [99, p.170].

According to L. Pleukhova, the main task of informatization of education is to form the need for every member of society to constantly improve their educational level. Therefore, an important task of the teacher is to teach 15 young people to learn independently, which necessitates the need to focus on the development of individual characteristics of each educational recipient, including his individual characteristics of motivation [157, p. 20].

L. Kolmogorova emphasizes that in the process of computer-based learning the important task of the teacher is the ability to exchange information, to engage in dialogue and on this basis to establish and maintain appropriate relations with the participants of the educational process, to create educational plans of independent and joint activities, to choose the optimal methods and means of their implementation, as well as to organize the system of control, self-control [93; p.80].

Based on the above, it is concluded that teachers should be willing to develop information competence in future foreign students of medical

specialties. However, the results of the pilot study, which was attended by 368 teachers and 496 foreign students from different medical education institutions, showed an insufficient level of readiness. In particular, the data obtained in the course of its implementation showed that almost half of the surveyed teachers experience some difficulties in understanding the theoretical problems of informatization of medical education and the practical training of future medical-foreign physicians using modern computer educational tools and technologies, in particular the formation of information competence of these educational recipients. Thus, in terms of understanding theoretical issues, teachers in particular called the following difficulties:

 problems related to the theoretical substantiation of the need for informatization of medical education and determining the ways of its implementation in practice;

 lack of awareness of the use of information technology that links medical sciences to teaching practice;

- the sensation of barriers to the design of software products that ensure the implementation of modern information technologies in the educational process and more.

Concerning the practical interaction with foreign medical students, teachers identified the following difficulties:

- the complexity of selecting and implementing appropriate information and technology information for specific teaching situations; difficulties in obtaining timely and adequate information when establishing feedback with foreign recipients in the educational process and, in particular, the formation of information competence in them;

- insufficient formation of skills of current and final evaluation, monitoring of information competence of students, etc. According to the results of the pilot study, it is also determined that almost 69% of the experiment participants recognize the lack of level of their own information competence,

which makes them poorly used by modern computer tools and information and communication technologies.

In addition, these educators often experience a certain psychological barrier to the use of these tools and technologies to effectively find the information they need. This situation is the reason that the specified category of teachers have serious difficulties in forming the specified competence in foreign applicants for medical education. Similar results were obtained during the survey of foreign medical students, who also noted the lack of awareness of many teachers about the use of modern information and technologies in the educational process, and as a consequence - their inability to increase the level of information competence of students. Thus, 47.3% of students admitted that in many teaching situations, teachers were unable to provide them with effective pedagogical assistance in addressing certain issues related to the use of modern information technologies, due to the low level of their own information competence, which negatively affected the state of the students' motives for mastering their competence. In view of the above, it is concluded that the first pedagogical condition that ensures the efficiency of the process of formation of information 17 competences in future foreign students of medical specialties is the implementation of methodological training of teachers for the formation of information competence of future foreign physicians. In particular, during the substantiation of the second condition, which contributes to the improvement of the efficiency of formation of information competence in future foreign students of medical specialties, we in particular took into account the conclusions of scientists (R. Gurevich, M. Kademiya, L. Shevchenko) about the importance of active use of modern information technologies in the teaching of students, which is now necessary [91, c. 92-94]. As it has been found out, many scientists consider it necessary to purposefully create an educational and educational environment in the educational institution. Thus, according to the findings of M. Shishkina and M. Popel, an appropriate information and educational

environment should be created in each educational institution, since the use of ICT and digital technologies significantly influences the acquisition of quality education [93, p. 66-68].

Similar ideas are expressed by O. Morgulets and L. Gritsayenko, who believe that the information and educational environment is a necessary component of ensuring the quality of higher education in the contemporary context of its modernization [130, p. 114]. Scientists identify the following basic functions of the information and educational environment: communicative (interactive communication), information, epistemological (prompt transfer of information between participants in the educational process), diagnostic (monitoring the quality of learning outcomes of higher education applicants), organizational, managerial, cultural, etc. [ibid]. We are impressed by the opinion of O. Griban, who notes that modern institutions of higher education are interested in the qualitative preparation of their graduates, and this implies the need to create an information and educational environment that provides the solution of educational, research and other tasks at the level of modern requirements of the information society, implementation of systematic implementation of 18 information technologies in all types of organization of the organization [44; pp. 51-52]. In the light of the above, it is advisable to clarify how scientists are interpreted the concept of "information and educational environment". Thus, S. Yaylanov defines this concept as a systematically organized set of data transmission, information resources, protocols, interaction of hardware and organizational and methodological support, which is focused on meeting the educational needs of users [116; 233]. N. Nikulicheva under the information and educational environment understands the environment, which includes a system of distance learning tools, reference materials, dictionaries, additional literature, i.e. all information and electronic educational resources used will facilitate the acquisition of quality training in a certain course or discipline [139, p. 117]. O. Nazarova considers the information

and educational environment as a pedagogical system, which combines information educational resources, computer training, educational process management, pedagogical techniques, methods and technologies aimed at forming the intellectual, developed, socially significant creative personality, which has the necessary level of knowledge and competence [136; p.19]. According to R. Gurevich, M. Kademiya, L. Shevchenko, the information and educational environment is a set of technical, software tools for storing, processing and transmitting information, as well as political, economic and cultural conditions for the implementation of informatization processes [48, p. 93]. In other scientific works, the information and educational environment is also understood as: a set of computer tools (hardware, software, informational) and methods of their functioning used in the educational process of the educational institution (Yu. Caravan) [81]; holistic system or set of different subsystems, means of providing information-communication, technical and educational-methodical, which purposefully provide the educational process, as well as participants in the educational process 19 techniques, means, methods of solving educational tasks and ways of acquiring skills in the process of understanding the educational material (L. Konoshevsky); set of information, intellectual resources, information technologies, communication infrastructure containing communications of different categories of subjects (S. Titov) [212]; Hardware system, software, specialists, users, databases that implement information processes (S. Zelinsky) [72]. According to V. Andrievskaya and G. Tkachuk, the creation of an educational environment in a higher education institution must meet the requirements of the information society, the level of development of ICT according to world standards in education, since such an environment will provide different types of interaction between students and teachers in the conditions of using different learning tools, including distance and mobile, and will satisfy the needs of students and will promote its wide usage of ICT possibilities [4, p.164; 217, p. 8].

N. Morse and O. Kuzminskaya note that at the present stage the educational environment of the educational institution must contain the following components: personal computing devices; cloud technologies; collective individual communication support environments; open and educational resources; broadband access to computing resources; information security and centralized filtering incompatible with the content-learning process, etc. [116; 132; 184; 185]. In his research, N. Lobach emphasizes that the educational environment of a higher education institution should facilitate the realization of the following goals: stimulation of cognitive activity of students, their independence and self-organization; mastering basic knowledge and skills of information culture; formation of key competences that are necessary for the self-realization of the future specialist [116, p.74]. The ideas of N. Lomonosova also came in handy, which believes that the modern educational environment of the higher education institution should necessarily include: material information and educational (library funds of the educational organization, multimedia audiences with the possibility of access to the Internet, a set of educational and methodological works and manuals library holdings, complexes of test tasks, distance educational Internet repositories, multimedia laboratory complexes); communication training tools (e-mail, technical, software, automated systems for controlling the knowledge of students); systems of management of educational process (analytical and statistical systems of accounting of the contingent, educational-methodical complexes, individual trajectories of training, modular principle of construction of e-courses, development and introduction in the educational process of new promising learning technologies, continuous support of students' research work) [118, p.19-20; 193, p.368]. Therefore, it can be concluded that the educational environment of the modern medical education institution should ensure the effective formation of information competence of foreign students. However, according to the pilot study, the environment in these establishments is poorly formed. Thus, 68.7% of

teachers and 85.4% of students noted the existence of some difficulties when connecting to the student learning management system used in higher education, as well as working on this platform. 65.4% of the surveyed teachers and 82.5% of foreigners have attracted attention to the fact that the information and technological support of the educational process is too slowly updated in domestic medical education institutions. In view of the above, it is determined that the second pedagogical condition for the formation of information competence of foreign medical students is as follows: enrichment of the educational environment of the institution of medical education by innovative technical means of training, educational resources and technologies taking into account modern requirements for medical workers. In determining the third pedagogical condition, which ensures the effective formation of information competence of foreign students of medical specialties, we guided the conclusions of specialists about an important place in the process of teaching independent work of educational recipients and the need for competent implementation not only of diagnostics, but also of self-diagnosis of their formation of this competence. In particular, scientists (O. Griban, O. Glushak S. Basil. V. Tkachuk. T. Kiselev. O. Dobrovolskaya, V. Kramarenko. N. Lobach, etc.) note that in the process of information competence formation, students are given a prominent place. In turn, this significantly increases the role of self-diagnosis of their own information competence [44; 52; 85; 101; 115 116; 192; 216].

Thus, O. Griban notes that an important condition for an objective assessment of the achievement of the appropriate level of information competence of students is, on the one hand, to carry out diagnostics by the teacher of their academic achievement during the completion of all stages of computer-aided learning, and on the other - self-diagnostics and each student's own learning process [44; p.88-89]. O. Glushak rightly emphasizes that in the process of forming the information competence of students it is necessary to

focus their attention on the self-diagnosis of the effectiveness of their activity during study and in the professional sphere [37, p. 106]. O. Ogienko believes that in the conditions of active use of information technologies in the educational process, one of the main functions of learning is to ensure self-diagnosis, self-control, self-correction by the subjects of the process of their own learning [142].

Therefore, the process of forming the information competence of students involves the implementation of their constant monitoring of current and final results, conducting self-diagnosis of the state of formation of this competence However, according to the results of the survey of teachers within the framework of the pilot study, most foreign students (63.4%) are not able to competently perform the process of self-diagnosis. In addition, more than half of students (58.8% of the total number of participants) also acknowledged that they had significant difficulties in diagnosing the level of their own information competence. Moreover, students noted that only a third of teachers pay sufficient attention to ensuring the mastery of future professionals necessary for the implementation of this procedure with knowledge and skills, systematically involve students in its implementation. Summarizing the above considerations, it should be noted that the third pedagogical condition that provides the formation of information competence is as follows: enriching the educational environment of the medical education institution with innovative technical means of training, educational resources and technologies, taking into account modern requirements for medical workers. Therefore, the study determined that the effective formation of information competence of foreign students of medical specialties ensures compliance with the following pedagogical conditions: implementation of technological and methodological training of teachers for the formation of information competence of future foreign physicians; enrichment of the educational environment of the medical education institution with innovative technical means of training, educational resources

and technologies taking into account modern requirements for medical workers; Involvement of foreign students in the self-diagnosis of the achieved level of information competence and the process of mastering it.

Thus, it can be summarized that the above-mentioned activity-procedural block of the system of formation of information competence of foreign students of medical specialties in the educational environment of the university, which defines the stages, methods, forms, means, technologies, conditions of formation of this competence in future physicians, comprehensively reflects the course of the specified process. However, its effectiveness is largely conditioned by a well-chosen criterion-diagnostic apparatus of the study. This aspect of the study is reflected in the result-evaluation block of the developed system.

4.2.5 The resultative and evaluation unit

During the study it is concluded that the resultative and evaluation unit of the didactic system of formation of information competence of foreign students of medical specialties contains criteria and indicators of formation of foreign medical students of information competence, levels of formation of information competence, criteria, diagnostic tools and prospective result of the realization of the developed system.

In particular, in order to determine the optimal criteria and indicators of the formation of foreign students' information competence, it is necessary to first clarify what constitutes the very concept of "criterion" and "indicator", since they have different interpretations in the scientific literature. The analysis of reference and encyclopedic literature gives grounds to claim that the criterion (from the Greek. Kriterion - "means of judgment", "measure of assessment", "indicator") - determination of a certain phenomenon, evaluation or classification of something; a certain measure for evaluating an object or

phenomenon; the sign on the basis of which the definition or classification of something is made [155; 188; 189], an objective essential characteristic that provides a comparative assessment of a particular phenomenon, identification of the degree of qualitative and quantitative changes; the basis of the classification, indicator, landmark, etc., through which the objects are evaluated, classified, the significance or insignificance of certain aspects in the state in which they are [29; 90; 168].

In the scientific and pedagogical literature, the criterion has a similar interpretation and is defined as a standard, a measure, a benchmark, an indicator, on the basis of which the assessment, classification of a certain pedagogical phenomenon or process, comparison with a certain standard [8; 62; 160].

Taking into account the fact that scientists approach the definition of the concept "criteria" ambiguously, we consider it necessary to present the most common views of scientists on the interpretation of this definition:

a list of requirements that characterize the levels of knowledge,
 habits, skills to be learned by the subject of study during the study of a particular discipline, T. Burkin [26, p.5];

a measure of evaluation of the phenomenon and changes that occur
 in it in the process of development of its individual components or personality
 as a whole (L. Putlyayev) [172, p. 37];

a certain measure, norms that indicate the implementation of the procedure of evaluation and determination of the evaluation of a particular subject or phenomenon (V. Shakhov) [228, p. 111];

- generalized indicator of system development, success of activity, basis for classification (V. Zagvyazinsky) [68, p. 199];

- general essential feature that provides evaluation, as well as the comparison of real pedagogical phenomena (G. Serikov) [183, p. 93];

the property on the base of which to monitor something that allows you to measure the object and, on this basis, to give it an estimate (N. Nagaychenko) [135, p. 96];

qualities, properties, features of the object under study, which make it possible to characterize its state and the level of its formation (N. Balovsyak)
 [11; 12];

 means for forming judgment, as well as the signs that are grounds for evaluating something (A. Verkhol) [31, p. 11].

We share V. Kurilo's opinion on the concise interpretation of a certain concept. The researcher believes that the criteria should be considered as the quality and characteristics of a particular phenomenon to be evaluated [109, p. 35]; According to M. Bratko, all criteria of quality of education are conditionally divided into the following groups:

- criteria of fact (quantitative indicators);

- quality criteria (demonstrate depth, process strength);

- attitude criteria (allow to draw conclusions about motives of behavior, actions, choices);

- time criteria (show stability in temporal dimension of learning outcomes) [25, p.367-368].

It should also be noted that A. Novikov's conclusions were used in the study, who believes that the development of criteria should adhere to a clear fixation of questions about the properties under study, and a detailed formulation of the criteria for evaluating these properties will reveal the scientific value of the obtained data at a higher scientific-theoretical and practical levels [44, p.109 140, p. 39]. The criteria on the basis of which the dynamics and results of the formation of information competence are monitored and evaluated should be complex but differentiated [44, p. 109].

The results of the analysis of the scientific literature also indicate the existence of other requirements that are put to the choice of criteria. Based on the generalizations of different points of view of scientists on this issue, it is concluded that the criteria in the educational field should provide:

- objectivity, individuality, systematic, thematic orientation, consistency, optimality, comprehensiveness, efficiency, humanity;

- display of essential, stable, stable features, qualities of the object under study;

 providing sufficient evaluation data; unity of requirements on the part of teachers, motivation of assessments;

- reflecting the dynamics of measured quality in space and time;

 measurement of all components that are part of the investigated environment and the presence of interconnections between them;

 compactness, convenience, understandability for all participants in the educational activities during their practical use;

estimation of the existing level of formation of a certain quality in dynamics;

- the optimal combination of quantitative and qualitative assessment methods that relate not only to external actions and actions, but also to the inner world of man;

deployment and the presence of greater or lesser level of expression
(the ability in real practice to "measure" reality compared to the ideal) [8; 13;
31; 62; 75; 145; 150; 160; 193; 213].

It should be noted that the criteria are specified and expressed by qualitative and quantitative indicators, which allow to formulate judgments about a certain degree of expression of the phenomenon or process under study, with qualitative indicators being supplemented and consistent with the selected quantitative indicators [86; 145; 158 193; 213; 225; 232].

As it is stated in the study, the term "indicator" is understood by scientists as: the degree of formation, evidence, a sign of something, a certain quality of the object under study; specific data on human achievements in a particular field; a phenomenon that shows the course and results of the process under study; data on human achievements in the chosen field; quantitative and qualitative characteristics of the formation of each quality, properties, features of the object under study; individual qualitative and quantitative characteristics of the criterion; visual data that indicate the results of a particular work or process [8; 13; 31; 62; 90; 145; 150; 160; 193; 213; 232].

As it is stated in the study, the criteria and indicators are closely interrelated, but the first concept is broader than the second, which causes the interaction between them as a whole and its part. After all, with one criterion there can be a large number of indicators, while the correct choice of indicators is due to a scientifically sound choice of the criterion. It should be noted that the quality of the indicator will depend on how fully and objectively it characterizes the selected criterion, because the correct choice of the appropriate indicators is conditioned by a scientifically sound choice of the criterion. Thus, the criteria, indicators and their characteristics are components of a particular system, as it reflects the essential characteristics of the pedagogical phenomenon under study because of its internal integrity and orderliness [20; 100; 146; 193; 213; 232].

Exploring the essence and content of the concept "indicator", V. Bagri outlined the requirements according to which the definition of indicators should be: content and efficiency; clarity and understandable content for the possibility of objective measurement, maximum display of the holistic characteristics of the object of study [8, p. 10].

Based on the above, it can be summarized that the criteria for the formation of information competence of foreign students of medical specialties in the educational environment of the university are selected standards for determining the formation of this competence, certain indicators by which the

procedure for their evaluation is performed. Accordingly, each of the criteria has the appropriate indicators - specific quantitative or qualitative characteristics of information competence formation. It should be noted that when selecting the criteria and indicators of the formation of information competence of foreigners-foreign medical specialties, other researchers on this issue became useful. Thus, the conclusions of N. Lobach, who defined the following criteria and indicators of the formation competence of students:

motivational, the indicators of which are determined: understanding the value of information;

 focus on knowledge acquisition; activity of the subject of training in the performance of information and analytical activities;

- awareness of the importance of this competence for a successful human life in modern society;

– cognitive, the indicators of which are: knowledge of the essence and content of information and analytical activity in the educational environment of a higher institution of medical education, methods, forms, ways of its implementation by the subjects of training within the educational environment;

knowledge of the norms of information culture and information ethics;

– activity-oriented, which has the following indicators: the level of ownership of the techniques of search, selection, processing, practical use and presentation of the obtained information from some sources in the shortest time; the manifestation of computer literacy, the development of analytical thinking in processing and presenting information;

- reflexive, the indicators of which are characterized by: the adequacy of self-assessment of one's own information competence; the formation of the need for its formation [116, p. 114-115].

426

In carrying out diagnostic procedures, K. Horde identified the following criteria and indicators of the formation of information and communication competence of future family doctors:

motivational (guidance), which contains the following indicators:
 availability of motivation for professional activity, assimilation of professional
 values and success in the chosen activity;

- cognitive (cognitive), which characterize such indicators as: communicative and linguistic literacy, awareness in the ways of effective professional communication, including modern ICTs used in professional activity;

 activity-oriented (behavioral), indicators of which are: availability of communicative, prognostic skills and abilities, ability to organize work with electronic telemedicine systems;

- personality-oriented (emotional-volitional), the indicators of which include: the presence of empathy, communicative tolerance, emotional self-regulation [145; 146].

F. Apshay identified the following criteria and indicators of the formation of ICT competence of future specialists:

cognitive (indicators: level of knowledge of the conceptual apparatus; ability to relate the acquired knowledge with future professional activity);

 value-motivational (indicators: formation of stable professional motives and personal, socially oriented, professional qualities of the individual);

 activity-oriented (indicators: level of mastery of practical skills);
 reflexive (indicators: self-assessment of the level of one's own achievements and orientation to professional self-improvement) [5;p. 125].

O. Griban's scientific research, devoted to the study of the problem of formation of information competence in students of pedagogical university, was

of great value to us. The scientist has identified such criteria indicators, which serve as the basis for the implementation of step-by-step elemental analysis to determine the level of information competence of each student. The following criteria are:

competence in the use of standard information processing tools;

 competence in the field of organization of educational work through computer technologies in the subject area;

- technological competence [44, p.108-110].

It should be noted that L. Dobrova, who in the research on the problem of forming the information competence of students of technical higher education, demonstrates a similar scientific position on the outlined issue, for the diagnosis of its formation distinguishes the same criteria in the context of the possession of special competencies [50; 51].

Therefore, taking into account the above and the results of our own experience of teaching, it was determined that in the study *motivational and targetive criterion was selected as* the first criterion for the formation of foreign medical students information competence. It is represented by the following indicators:

- the nature of interest in information activities;

 foreign students motives for further development of information competence for effective implementation of educational and professional activity.

The study concludes that *knowledge-oriented and operative criterion* is determined as the second criterion for the formation of foreign medical students of information competence. It is specified by the use of the following indicators:

 necessary knowledge and groups of skills that provide the manifestation of information competence (intellectually-creative, constructiveprojective, educational-informational, reflexive-evaluative). *Personality-axiological criterion* is identified as the third criterion in the study, which corresponds to the following indicators of formation in foreign medical students information competence:

- the nature of the manifestation of personal qualities necessary for the manifestation of information competence: persistence, attentiveness, stability, independence, reflectiveness, creativity; adequacy of their self-esteem by students.

Selected criteria and indicators of information competence formation of foreign students of medical specialties are presented in Table 4.1.

Table 4.1

Criteria and indicators of information competence formation of foreign students of medical specialties

Criteria	Indicators
1	2
motivational- targetive	nature of interest in information activity; formation in international students motives for further development of information professional activity
cognitive and operational	formation of the necessary knowledge and groups of skills that provide the manifestation of information competence (intellectual-creative, constructive- projective, educational-informational, reflexive- evaluative)
personality- axiological	character of manifestation of personal qualities necessary for the manifestation of information, competency, independence, reflexivity, sociability, creativity; the adequacy of self-esteem by students

Let's clarify that the criteria and indicators are related to the concept of "level". In reference sources, the term is interpreted as the degree of a certain quality, the magnitude of some achievements [29, p. 1223] and characterizes the degree of detection and development of an indicator of one or another criterion

[8; 40; 105; 145]. In this regard, the findings of scientists (O. Vasilyev, V. Ryabokon, etc.) were used, who note that the effectiveness of the formation of a particular competence largely depends on determining its level characteristic. The level of formation of one or another quality, the ability of a person is established on the basis of the use of certain criteria and indicators as a conditional measure, which allows to grasp the essence of a certain object and on this basis to evaluate it [28; 176].

Therefore, in the research under the level of formation of information competence of foreign students of medical specialties we understand the conditional measures of quantitative and qualitative manifestations of this competence, which allow to carry out the procedure of diagnostics in students of its degree of formation. Thus, on the basis of the application of certain criteria and indicators, three levels of formation of information competence of foreign students were distinguished: *elementary, basic, creative*.

Also we'd like to note that diagnostic tools were used to diagnose the formation of foreign information competences, in particular different methods were selected, such as:

- observation of foreign students in the search for information, work with a computer, communication, interaction with other people;

- questioning and testing of students;
- interviews (with foreign students, teachers, practitioners, etc.);
- independent evaluation;
- special diagnostic techniques.

As it is found out, during the diagnostics of information competence, certain steps should be followed. In this regard, scientific research of O. Ivanyuta, V. Tkachuk, S. Basil, N. Lobach, E. Morkovina, A. Zavyalova, O. Griban [10; 44; 66; 76; 134; 216] are considered.

Let us clarify that today there is a wide range of choice of diagnostic tools that the teacher can choose at his own discretion, which will be appropriate and

optimal for a specific educational situation. Diagnostic tools are described in the next section. In particular, scientists (O. Gerasimchuk, T. Korchinskaya, N. Tkachova, N. Shiyan, T. Shcheblikina, O. Shusharyna, etc.) propose to use the following diagnostic tools that are optimally practiced in higher education institutions: interviews, testing, questioning, observation [35; 100; 193; 215; 229; 231; 232].

It should be noted that the implementation of diagnostics of information competence of foreign students requires the use of appropriate methods and means of diagnosing these achievements. The analysis of the scientific and pedagogical literature makes it possible to conclude that one of the most popular methods of pedagogical diagnostics today is the method of testing, the purpose of which is to determine the relative measure, the prudence of the individual trait based on the maximum use of quantitative indicators [84; 112; 191; 193; 232].

T. Shcheblikina under the test proposes to understand a set of standardized tasks that allow to measure the level of formation of certain achievements of students. In turn, testing is considered as a scientifically sound procedure for diagnosing student achievement, which is carried out through the use of presented tests [232, p. 290]. According to scientists (L. Smolinchuk, T. Shcheblikina, T. Sobchenko, A. Tkachov, etc.), testing as a modern technology and an integral part of the learning process implements certain functions, provided that it is properly organized. Among these functions, the authors distinguish such as:

diagnostic (involves obtaining information about the quality of knowledge, skills and skills, which allows to identify problems, gaps in the learning process);

educational (allows to consolidate the acquired knowledge, to form a culture of intellectual work);
upbringing (promotes the development of educational motivation, the formation of a sense of responsibility for their own results, encourages selforganization and self-development);

- developmental (involves the activation of reflection and the development of professional abilities);

- organizational (helps to organize the educational process using test methods); prognostic (provides potential opportunities for learning subjects in learning the learning material) [191; 193; 213; 232].

Also, appropriate methods (observations, interviews, testing, questionnaires, independent evaluation, self-assessment etc.) as well as special diagnostic techniques ("Defining the vital values of the individual" (must-test) "(P. Ivanov, O. Kolobov), "Methods for studying the factors of professional attractiveness" V. Yadov, N. Kyzmina, A. Rean), "Diagnosis of Personal Creativity "(O. Tunik), etc.) were selected for diagnostics of information competence of foreign students.

It is also worth noting that the resultative-evaluation unit of the didactic system of formation of information competence of foreign students of medical specialties in the educational environment of the university contains the expected result of the implementation of this system: increasing the level of information competence of students.

Literature to chapter 4

1. Авраменко Н. О. Підготовка майбутніх лікарів-іноземців до оволодіння професійною термінологією у медичних закладах вищої освіти: дис. ... канд. пед. наук: 13. 00.04. Хмельницький, 2019. 354 с.

2. Александров Г. Н., Иванкова Н. И., Тимошкина Н. В. Педагогические системы, педагогические процессы и педагогические технологии в современном педагогическом знании. Образовательные технологии и общество. 2000. № 2. С. 134–149.

3. Александров И. М. Концептуальные и технологические основы педагогической диагностики и ее реализация в высших военно-учебных заведениях: дис. ... д-ра пед. наук: 13.00.08. Москва, 2002. 410 с.

4. Андрієвська В. М. Теоретичні і методичні засади підготовки майбутнього вчителя початкової школи до використання інформаційнокомунікативних технологій у професійній діяльності: дис. ... д-ра пед. наук: 13.00.04 / Харк. нац. пед. ун-т імені Г. С. Сковороди. Харків, 2019. 432 с.

 Апшай Ф. В. Формування ІКТ-компетентності майбутніх фахівців галузі «Культура і мистецтво»: дис. ... канд. пед. наук : 13.00.04 / Рівн. держ. гуманіт. ун-т. Рівне, 2021. С. 235.

6. Бабанский Ю. К. Педагогика: учеб. пособие. Москва: Просвещение, 1983. 608 с.

7. Бабінець С. Моніторинг якості освіти: педагогічний аналіз. Директор школи. Україна. 2006. № 1. С. 4–9.

8. Багрій В. Н. Критерії та рівні сформованості професійних умінь майбутніх соціальних педагогів: зб. наук. праць Хмельн. ін-ту соціальних технологій Ун-ту "Україна" / Хмельн. ін-т соц. технологій Ун-ту "Україна". Хмельницький : Вид-во ХІСТ, 2012. № 6. С. 10–15.

9. Бадер С. О. Система формування ціннісно-смислових орієнтацій майбутніх вихователів закладів дошкільної освіти у фаховій підготовці: дис. ... д-ра пед. наук 13.00.04. Старобільськ, 2020. 576 с.

10. Базиль С. Діагностика процесу формування інформатичної компетентності майбутніх педагогів професійного навчання. *Traektoriâ Nauki = Path of Science*. 2020. Vol. 6, no. 9. P. 3001–3011. URL: https://doi.org/10.22178/pos.62-6 (date of access: 04.12.2022).

Баловсяк Н. В. Інформаційна компетентність фахівця.
 Педагогіка і психологія професійної освіти. 2004. № 5. С. 21–28.

12. Баловсяк Н. В. Формування інформаційної компетентності майбутнього економіста в процесі професійної підготовки: дис. ... канд. пед. наук: 13.00.04 / Ін-т педагогіки і психології професійної освіти АПН України. Київ, 2006. 334 с.

13. Басараб В. Я. Критерії сформованості ключових компетентностей майбутніх обліковців з реєстрації бухгалтерських даних у процесі професійної підготовки. *Науковий вісник*: зб. наук. пр. Ужгород. нац. ун-ту. Сер.: Педагогіка. Соціальна робота. Ужгород, 2014. Вип. 34. С. 25–28.

14. Беспалько В. П. Слагаемые педагогической технологии. Москва: Педагогика, 1989. 190 с.

15. Беспалько В. П. Элементы теории управления процессом обучения. Ч. 2. Измерение качества процесса обучения. Москва: Знание, 1971. 72 с.

16. Бєляєв С. Б. Ознаки педагогічної системи. *Наукові записки кафедри педагогіки*: зб. наук. пр. Харк. нац. ун-ту імені В. Н. Каразіна. Харків, 2013. Вип. 32. С. 26–32.

17. Бичко М. В. Підготовка майбутніх сімейних лікарів до застосування медичного обладнання в професійній діяльності: автореф. дис. ... канд. пед. наук : 13.00.04. Хмельницький, 2021. 20 с.

18. Білик О. М. Теорія та методика соціалізації іноземних студентів в освітньо-культурному середовищі вищого навчального закладу: дис. ... дра пед. наук : 13.00.05 / Харк. держ. акад. культури; Держ. закл. «Луганський нац. ун-т імені Тараса Шевченка». Старобільськ, 2018. 683 с.

19. Бісмак О. Формування інформаційно-комунікаційної компетентності майбутніх фахівців з фізичної реабілітації. *Освітологічний дискурс*. 2017. №3–4. С. 338–351.

20. Богданова І. М. Модульна технологія у професійній підготовці вчителя: монографія / за ред. І. А. Зязюна. Одеса: Учбова книга, 1997. 289 с.

21. Бондарев М. Г., Трач А. С. Принципы смешанного обучения английскому языку для специальных целей. *Известия ЮФУ. Технические науки.* 2012. С. 41–48.

22. Борытко Н. М., Соловцова И. А. Управление образовательными системами : учеб. для студ. пед. вузов / под ред. Н. М. Борытко. Волгоград: Изд-во ВГИПКРО, 2006. 48 с.

23. Боярчук Н. Модель формування професійної компетентності майбутніх економістів. *Педагогічні науки*. 2013. № 1 (57). С. 85–95.

24. Бражнич О. Г. Педагогічні умови диференційованого навчання учнів загальноосвітньої школи: дис. ... канд. пед. наук: 13.00.09. Кривий Ріг, 2001. 238 с.

25. Братко М. В. Теоретичні і методичні засади управління професійною підготовкою фахівців в освітньому середовищі університетського коледжу: дис. ... д-ра пед. наук. 13.00.04, 13.00.06 / Київ. ун-т імені Бориса Грінченка, Держ. вищ. навч. закл. «Університет менеджменту освіти»; Нац. акад. пед. наук. Київ, 2018. 598 с.

26. Буркіна Н. С., Лукіна Т. О. Модель моніторингу підготовки учнів. Шкільний світ. 2001. № 9 (89). С. 2–8.

27. Важинський С. Е., Щербак Т. І. Методика та організація наукових досліджень: навч. посіб. Суми: СумДПУ імені А. С. Макаренка, 2016. 260 с.

28. Васильєва О. В. Критерії та рівні сформованості комунікативної компетентності молодших школярів. *Педагогічний альманах* : зб. наук. пр. / КВНЗ «Херсон. академія неперервної освіти». Херсон, 2013. Вип. 20. С. 16–22.

29. Великий тлумачний словник сучасної української мови / уклад. і голов. ред. В. Т. Бусел. Київ : ВТФ; Ірпінь : Перун, 2009. 1736 с.

30. Вербицька П. В. Теоретико-методичні основи громадянського виховання учнівської молоді у загальноосвітніх навчальних закладах : дис. ... д-ра пед. наук: 13.00.07. Київ, 2010. 489 с.

31. Верхола А. П. Критерии и способы оптимизации процесса обучения вузовским дисциплинам: автореф. дис. ... д-ра пед. наук: 13.00.01. Киев, 1986. 21 с.

32. Викторова Л. Г. О педагогических системах. Красноярск : Издво Красноярского ун-та, 1989. 101 с.

33. Володко І. В. Формування інформаційно-комунікаційної компетентності майбутніх фахівців фізичного виховання і спорту: дис. ... канд. пед. наук: 13.00.04 / Нац. пед. ун-т імені М. П. Драгоманова. Київ, 2016. 253 с.

34. Вязова О. В. Информатизация образовательного пространства : на примере учителя информатики: дис. ... канд. пед. наук: 13.00.01. Тамбов, 2005. 240 с.

35. Герасимчук О. О. E-Learning. Технології електронного навчання: навч. посіб. Луцьк: РВВ ЛДТУ, 2008. 432 с.

36. Герчанівська П. Е. Культурологія: термінологічний словник.Київ: Національна Академія керівних кадрів культури і мистецтв, 2015.439 с.

37. Глушак О. М. Формування інформатичної компетентності бакалаврів філології у процесі навчання. Освітологічний дискурс. 2016.
 № 2 (14). С. 106–114.

38. Головань М. С. Інформатична компетентність: сутність, структура, становлення. *Інформатика та інформаційні технології в навчальних закладах*. 2007. № 4. С. 62–69.

39. Гончаренко С. Український педагогічний словник. Київ: Либідь, 1997. 374 с.

40. Гончаренко Т. Л. Критерии, показатели и уровни готовности учителя физики к проектированию учебного процесса. *Вестник Алтайской государственной педагогической академии*. 2012. № 13. С. 33– 40.

41. Гора Н. В. Педагогічні умови формування професійної компетентності майбутніх товарознавців. *Молодий вчений*. 2018. № 6 (1). С. 134–137. URL:http://nbuv.gov.ua/UJRN/molv_2018_6%281%29_32 (дата звернення: 02.08.2022).

42. Горбань О. М., Бахрушин В. Є. Основи теорії систем і системного аналізу: навч. посіб. Запоріжжя : ГУ «ЗІДМУ», 2004. 204 с.

43. Грибан О. Н. Формирование информационной компетентности студентов исторического факультета педагогического вуза: дис. ... канд. пед. наук. / Ленингр. гос. ун-т им. А. С. Пушкина. Санкт-Петербург, 2012. 254 с.

44. Грибан О. Н. Формирование информационной компетентности студентов педагогического вуза: монография / ФГБОУ ВПО «Урал. гос. пед. ун-т». Екатеринбург, 2015. 162 с.

45. Грицька Т. С. Етапи формування інформаційних компетентностей учнів. *Комп'ютер у школі та сім'ї*. 2010. № 1. С. 41–42.

46. Губанов В. А., Захаров В. В., Коваленко А. Н. Введение в системный анализ: учеб. пособие. Ленинград: Изд-во Ленинград. ун-та, 1988. 232 с.

47. Гуменна І. Р. Структура готовності майбутніх лікарів до професійної комунікації. *Науковий вісник Ужгородського університету*. *Серія: «Педагогіка. Соціальна робота»*. 2016. Вип. 1 (38). С. 101–103.

48. Гуревич Р. С., Кадемія М. Ю., Шевченко Л. С. Інформаційні технології навчання: інноваційний підхід: навч. посіб. / за ред. Р. С. Гуревича. Вінниця: Планер, 2012. 348 с.

49. Давыдов Н. А., Аминов И. И., Поляков С. П. Современная подготовка юристов: бакалавров, специалистов и магистров в вузах (опыт проектирования и реализации). Москва, 2015. 320 с.

50. Доброва Л. В. Формирование информационной компетентности студентов технического вуза в процессе активного обучения: дис. ... канд. пед. наук: 13.00.08. Шуя, 2009. 234 с.

51. Доброва Л. В. Формирование информационной компетентности студентов технического вуза в процессе активного обучения: автореф. дис. ... канд. пед. наук : 13.00.08. Шуя, 2009. 23 с.

52. Добровольська О. В. Використання інформаційнокомунікаційних технологій для формування інформаційної компетентності студентів. Прогресивні техніка та технології харчових виробництв ресторанного господарства і торгівлі. 2012. Вип. 1. С. 585–591.

53. Долинський Б. Т. Системний підхід у підготовці майбутніх учителів початкової школи до науково-дослідницької діяльності. *Наука і освіта*. 2011. № 8. С. 50–52.

54. Доценко С. О. Дидактична система розвитку творчих здібностей учнів початкової школи у процесі вивчення предметів природничоматематичного циклу: дис. ... д-ра пед. наук: 13.00.09 / Харк. нац. пед. унт імені Г. С. Сковороди. Харків, 2019. 499 с.

55. Дрокіна А. С. Формування інформаційної компетентності майбутніх учителів початкової школи в процесі професійної підготовки: дис. ... канд. пед. наук: 13.00.04 / Україн. інженерно-пед. акад. Харків, 2020. 308 с.

56. Дурманенко О. Теоретичний аналіз поняття «педагогічні умови» в контексті моніторингу виховної роботи у вищому навчальному закладі. *Молодь і ринок*. 2012. № 7 (90). С. 135–137.

57. Енциклопедія освіти / гол. ред. В. Г. Кремень. Київ: Юрінком Інтер, 2008. 1040 с.

58. Єжова О. Класифікація моделей в педагогічних дослідженнях. Наукові записки Центральноукр. держ. пед. ун-ту імені Володимира Винниченка. Серія: Проблеми методики фізикоматематичної і технологічної освіти. Кіровоград: РВВ КДПУ ім. В. Винниченка, 2014. Вип. 5. С. 202–206.

59. Жернов В. И. Теоретико-методологические основы формирования профессионально педагогической направленности личности студента педагогического вуза: монография. Магнитогорск: Магнитогорский гос. пед. ин-т, 1999. 116 с.

60. Жижко Т. А. Педагогічна система один із чинників впровадження ідеї інтенсифікації у професійній підготовці майбутніх фахівців. *Науковий часопис НПУ імені М. П. Драгоманова. Серія 11: Соціологія. Соціальна робота. Соціальна педагогіка. Управління*: зб. наук. пр. Київ, 2005. Вип. 3. С. 144–151.

61. Житєньова Н. В. Теоретичні і методичні засади професійної підготовки майбутніх учителів природничо-математичних дисциплін до використання технології візуалізації в освітньому процесі: дис. ... д-ра пед. наук: 13.00.04 / Харк. нац. пед. ун-т імені Г. С. Сковороди. Харків, 2020. 538 с.

62. Жихорська О. Критерії, показники та рівні сформованості професійної компетентності навчально-допоміжного персоналу вищого навчального закладу. *Science and Education a New Dimension. Pedagogy and Psychology*. 2015. Вип. 69, III (34). С. 33–38.

63. Журавлева Н. А., Шкерина Л. В. Основные принципы и дидактические условия формирования базовых ключевых компетенций студентов – будущих учителей математики. *Вестник [Краснояр. гос. пед. ун-та имени В. П. Астафьева]*. 2011. № 4 (18). С. 30–35.

64. Заводнюк В. Л. Формування інформаційної компетентності учнів на уроках предмету «Технології». Сучасні інформаційні технології та інноваційні методики навчання в підготовці фахівців: методологія, теорія, досвід, проблеми. 2011. № 28. С. 114–18.

65. Завьялов А. Н. Педагогические проблемы эффективного формирования информационной компетенции. *XIII Ершовские чтения*: межвуз. сб. науч.-метод. ст. / под ред. В. Н. Евсеева. Ишим: Изд-во ИГПИ им. П. П. Ершова, 2003. С. 166–168.

66. Завьялов А. Н. Формирование информационной компетентности студентов в области компьютерных технологий (на примере среднего профессионального образования): автореф. дис. ... канд. пед. наук: 13.00.01. Тюмень, 2005. 17 с.

67. Загвязинский В. И. Исследовательская деятельность педагога: учеб. пособие для студ. высш. учеб. заведений. 2-е изд., испр. Москва: Издат. центр «Академия», 2008. 176 с.

68. Загвязинский В. И., Атаханов Р. Методология и методы психолого-педагогического исследования: учеб. пособие для студ. высш. пед. учеб. заведений. 2-е изд., стер. Москва, 2005. 208 с.

69. Зайцева О. Б. Формирование информационной компетентности будущих учителей средствами инновационных технологий: дис. ... канд. пед. наук: 13.00.08. Армавир, 2002. 169 с.

70. Закусилова Т. О. Формування основ професіоналізму майбутніх медичних сестер у процесі фахової підготовки: дис. ... канд. пед. наук: 13.00.04 / Класичний приватний університет. Запоріжжя, 2018. 318 с.

71. Зеер Э. Ф. Психология профессионального развития: учеб. пособие для студ. высш. учеб. заведений. Москва: Изд. дом «Академия», 2006. 480 с.

72. Зелінський С. С. Концепція інформаційно-освітнього середовища в процесі інформатизації системи вищої професійної освіти. Вісник Житомирського державного університету імені Івана Франка. Житомир, 2009. Вип. 47. С. 155–159.

73. Ильина Т. А. Системно-структурный подход к организации обучения. Москва, 1972. Вып. 1. 72 с.

74. Ипполитова Н. Анализ понятия «педагогические условия»: сущность, классификация. *General and Professional Education*. 2012. № 1. С. 8–14.

75. Іванова С. В. Критерії та показники розвитку професійної компетентності вчителів біології в закладах післядипломної педагогічної освіти. Вісник Житомир. держ. ун-ту ім. І. Франка. Сер.: Педагогічні науки. Житомир, 2010. Вип. 2. С. 152–156.

76. Іванюта О. О. Основні етапи моніторингу навчальних досягнень студентів-землевпорядників. *SWorld*. 2014. № 1–12 (October). URL : <u>http://www.sworld.com.ua/konfer36/236.pdf</u> (дата звернення: 02.08.2022).

77. Ілясова Ю. С. Професійна підготовка майбутніх молодших медичних спеціалістів у процесі вивчення фахових дисциплін: дис. ... д-ра філософії: 015 / Вінницький держ. пед. ун-т імені Михайла Коцюбинського. Вінниця, 2020. 338 с.

78. Інформаційні технології в навчанні: підручник. Київ: Вид. група ВНV. 2006. 240 с.

79. Ісаєва О. С. Формування особистісно-професійної культури майбутніх лікарів у процесі гуманітарної підготовки: монографія. Харків : Смугаста типографія, 2015. 364 с.

80. Капустин Ю. И. Педагогические и организационные условия эффективного сочетания очного обучения и применения технологий дистанционного образования: автореф. дис. ... д-ра пед. наук: 13.00.02. Москва, 2007. 42 с.

81. Караван Ю. В. Єдине інформаційно-освітнє середовище як важливий елемент підвищення якості підготовки. URL: <u>http://www.sworld.com.ua/konfer26/56.pdf</u> (дата звернення: 02.08.2022).

82. Карпенко Є. М. Педагогічні умови формування інформаційноаналітичних умінь майбутніх учителів іноземних мов у процесі фахової підготовки: автореф. дис. ... канд. пед. наук: 13.00.04 «Теорія і методика професійної освіти». Житомир, 2014. 20 с.

 Карпенчук С. Г. Теорія і методика виховання: навч. посіб. Київ: Вища школа, 2005. 343 с.

84. Касярум Н. В., Касярум О. П. Тестування як провідний метод діагностики навчальних досягнень студентів. *Вісник Черкаського університету*: зб. наук. статей. Черкаси, 2010. Вип. 189. С. 111–121.

85. Киселева Т. Г. Диагностика и формирование информационной компетентности средствами учебного предмета. URL: http://www.openclass.ru/node/62780 (дата звернення: 02.08.2022).

86. Кін О. М. Система формування національної самосвідомості студентської молоді в процесі громадської діяльності: дис. ... д-ра пед. наук: 13.00.07 / Луган. нац. ун-т імені Тараса Шевченка. Старобільськ, 2021. 553 с.

87. Класифікатор професій ДК 003:2010. *Офіційний вебпортал парламенту України*. URL: https://zakon.rada.gov.ua/rada/show/va327609-10 (дата звернення: 05.11.2022).

88. Ковалев А. П. Педагогические системы: оценка текущего состояния и управление. Харьков, 1990. 156 с.

89. Ковтун О. М. Формування світоглядної культури майбутніх медичних сестер засобами деонтологічного підходу: дис. ... канд. пед. наук: 13.00.04. Рівно, 2020. 336 с.

90. Коджаспирова Г. М., Коджаспиров А. Ю. Педагогический словарь. Москва: ИКЦ «Март»; Ростов-на-Дону: Издат. центр «Март», 2005. 448 с.

91. Козлакова Г. Зміна діяльнішої парадигми викладача при дистанційному навчанні. *Вища освіта України*. 2003. № 4. С. 91–95.

92. Колісник-Гуменюк Ю. І. Формування професійно-етичної культури майбутніх фахівців у процесі гуманітарної підготовки в медичних коледжах: монографія. Львів : Край, 2013. 296 с.

93. Колмогорова Л. С. Диагностика психологической культуры школьников. Москва: Владос-Пресс, 2002. 360 с.

94. Кононюк О. В. Формування інформаційно-комунікативної компетентності викладача вищої школи. *Педагогічне Криворіжжя*. 2020. № 6. С. 79–80.

95. Кононюк О. В. Формування інформаційно-комунікативної компетентності студентів при вивченні інформатики в медичному коледжі. Кривий Ріг, 2020. URL: <u>http://elibrary.kdpu.edu.ua/bitstream/123456789</u>/4058/1/%D0%9A%D0%BE%D0%BD%D0%BE%D0%BE%D0%BD%D1%8E%D0%B <u>A%20%D0%9E.%D0%92._%D0%97%D0%9F%D0%92%D0%A8%D0%BC-19.pdf</u> (дата звернення: 06.10.2021).

96. Коношевський Л. Л., Шахіна І. Ю. Інформаційне освітнє середовище закладу вищої освіти в період становлення інформаційного суспільства. URL: <u>https://ito.vspu.net/repozitariy/shahina</u>/<u>Karlovi_Vari_Shahina.pdf</u> (дата звернення: 02.08.2022).

97. Корбутяк В. І. Методологія системного підходу та наукових досліджень: навч. посіб. Рівне: НУВГП, 2010. 176 с.

98. Королецька Л. В. Розвиток екологічної культури майбутніх бакалаврів лісового і садово-паркового господарства у процесі фахової підготовки: дис. ... канд. пед. наук: 13.00.04. Старобільськ, 2018. 274 с.

99. Корчажкина О. М. Обучение в условиях информатизации. *Народное образование*. 2008. № 6. С. 169–175.

100. Корчинская Т. И. Измерение качества учебных достижений учащихся средствами компьютерного тестирования: дис. ... канд. пед. наук: 13.00.01 / Смоленск. гос. ун-т. Смоленск, 2008. 230 с.

101. Крамаренко В. Діагностичний апарат для визначення сформованості інформаційної компетентності майбутніх фахівців з навігації й управління суднами. *Педагогічні науки*. 2021. № 3 (26). С. 54–67.

102. Краткий психологический словарь / сост. Л. А. Карпенко; под ред. А. В. Петровского, М. Г. Ярошевского. Ростов-на-Дону : Феникс, 1998. 512 с.

103. Кривонос О. М. Склад основних компонентів інформаційнокомунікаційних компетентностей вчителя інформатики. Вісник Житомирського державного університету. Сер. Педагогічні науки. Житомир, 2014. Вип. 1 (73). С. 118–123.

104. Крылова Е. В. Внутренний мониторинг качества профессиональной подготовки студентов инженерного вуза : дис. ... канд. пед. наук: 13.00.08 / Моск. гос. индустр. ун-т. Москва, 2009. 221 с.

105. Кузьмин В. К., Крылов Д. А., Комелина В. А. Этнопедагогическая компетентность педагога: критерии, показатели и уровни сформированности. *Современные проблемы науки и образования*. 2013. URL: http://www.science-education.ru/119-14991 (дата звернення: 02.08.2022).

106. Кузьмина Н. В. Методы системного педагогического исследования. Ленинград : Изд-во ЛГУ, 1980. 172 с.

107. Кузьмина Н. В. Понятие «педагогической системы» и критерии
ее оценки. Методы системного педагогического исследования / под. ред.
Н. В. Кузьминой. Москва: Народное образование, 2002. С. 7–52.

108. Куренкова К. М. Формування професійних цінностей майбутніх медсестер у процесі фахової підготовки: автореф. дис. ... канд. пед. наук : 13.00.04. Харків, 2009. 21 с.

109. Курило В. С. Моделювання системи критеріїв оцінки розвитку освіти в регіоні. *Педагогіка і психологія*. 1999. № 2. С. 35–39.

110. Курило В., Савченко С. Особливості громадянської соціалізації молоді в умовах сучасних викликів. *Формування громадянських компетентностей фахівця нової формації*: матеріали Всеукр. наук.-практ. конф. (15 травня 2019 р.). Лисичанськ : ФОП Єгорова О. Є., 2019. С. 110–117.

111. Кустовська О. В. Методологія системного підходу та наукових досліджень: курс лекцій. Тернопіль : Економічна думка, 2005. 124 с.

112. Кухар Л. О., Сергієнко В. П. Методичні рекомендації зі складання тестових завдань / Нац. педаг. ун-т імені М. П. Драгоманова. Київ, 2011. 41 с.

113. Левенок I. Професійно орієнтований текст як засіб формування мовно комунікативних навичок іноземних студентів медичних спеціальностей. *Педагогічні науки: теорія, історія, інноваційні технології*. 2018. № 4 (78). С. 112–123.

114. Левит Е. И. Педагогическая система формирования эстетической культуры младших школьников в дополнительном музыкальном образовании: автореф. дис. ... д-ра пед. наук : 13.00.01. Нижний Новгород, 2013. 46 с.

115. Лобач Н. Діагностика сформованості інформаційно-аналітичної компетентності майбутніх лікарів. *Наукові записки Тернопільського*

національного педагогічного університету імені Володимира Гнатюка. Сер.: Педагогіка. 2018. № 1. С. 76–83.

116. Лобач Н. В. Формування інформаційно-аналітичної компетентності майбутніх лікарів в освітньому середовищі вищого медичного навчального закладу: дис. ... канд. пед. наук: 13.00.04 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2016. 234 с.

117. Лозицкий В. Л. Научно-методические основы применения электронных средств обучения по предметам социально-гуманитарного цикла (на примере истории). *Вышэйшая школа*: навук.-метад. і публіц. часопіс. 2009. № 5. С. 70–72.

118. Ломоносова Н. В. Система смешанного обучения в условиях информатизации высшего образования: дис. ... канд. пед. наук: 13.00.08 / Моск. гос. пед. ун-т. Москва, 2017. 191 с.

119. Лупиніс Т. Б. Структура інформаційної компетентності магістрантів соціальної роботи. *Теорія і практика управління соціальними системами*. 2012. Вип. 2. С. 104–114

120. Мазко О. П., Хоцінська А. С. Сутність інформаційно-цифрової компетентності учнів початкових класів. *Напрями розвитку мовної освіти у XXI столітті* : матеріали наук. інтернет-конф. з міжнарод. участю, (м. Житомир, 9–13 квіт. 2017 р.). Житомир, 2017. URL : <u>http://eprints.zu.edu.ua/26881</u> (дата звернення: 02.08.2022).

121. Малафіїк І. В. Дидактика: навч. посіб. Київ: Кондор, 2009. 406 с.

122. Мамонтов Я. А. Педагогічна система як принцип науковопедагогічного дослідження. Шлях освіти. 1927. № 5. С. 131–135.

123. Мамонтов Я. А. Хрестоматія сучасних педагогічних течій. Харків: Держ. видав. України, 1926. 636 с.

124. Манько В. М. Дидактичні умови формування у студентів професійно-пізнавального інтересу до спеціальних дисциплін.

Соціалізація особистості: зб. наук. пр. Нац. пед. ун-ту імені М. Драгоманова. Київ: Логос, 2000. Вип. 2. С. 153–161.

125. Марченко О. Г. Теоретичні і методичні засади формування освітнього середовища у вищих військових навчальних закладах авіаційного профілю: дис. ... д-ра пед. наук: 13.00.04 / Харк. нац. пед. ун-т імені Г. С. Сковороди. Харків, 2020. 553 с.

126. Медведева М. С. Формирование готовности будущих учителей к работе в условиях смешанного обучения: дис. ... канд. пед. наук: 13.00.01 / Иванов. гос. ун-т. Нижний Новгород, 2015. 220 с.

127. Мельникова I. Ю., Романцов М. Г. Особливості медичної освіти та роль викладача ВНЗ в освітньому процесі на сучасному етапі. *Міжнародний журнал експериментальної освіти*. 2013. № 11-2. С. 47–52.

128. Методичні рекомендації щодо розроблення стандартів вищої освіти : Наказ Міністерства освіти і науки України від 01.06.2017 р. № 600 (у редакції наказу Міністерства освіти і науки України від 30.04.2020 р. № 584. URL: https://mon.gov.ua/storage/app/media/vyshcha/naukovo-metodychna_rada/2020- metod-rekomendacziyi.docx (дата звернення: 06.10.2022).

129. Мокрогуз О. П. Роль мультимедійних засобів у формуванні інформаційної компетентності. Харків : Вид. група «Основа», 2017. 95 с.

130. Моргулець О. Б., Грицаєнко Л. М. Інформаційно-освітнє середовище у системі забезпечення якості освітньої діяльності ВНЗ. Формування ринкових відносин в Україні. 2015. №9 (172) С. 113–117.

131. Морзе Н. В. Система методичної підготовки майбутніх учителів інформатики в педагогічних університета: дис. ... д-ра пед. наук: 13.00.02 / Нац. пед. ун-т імені М. П. Драгоманова, Київ. 2003. 605 с.

132. Морзе Н. В., Кузьмінська О. Г. Педагогічні аспекти використання хмарних обчислень. *Інформаційні технології в освіті*. 2011. № 9. С. 20–29.

133. Морзе Н. В., Кузьмінська О. Г. Формування інформатичних компетентностей учнів середньої школи. Інформаційні технології і засоби навчання. 2011. № 3 (23). URL : <u>https://www.researchgate.net/publication</u>/341920400_FORMUVANNA_INFORMATICNIH_KOMPETENTNOSTEJ_UCNIV_SEREDNOI_SKOLI (дата звернення: 02.08.2022).

134. Морковина Э. Ф. Развитие информационной компетентности студента в образовательном пространстве: дис. ... канд. пед. наук. Оренбург, 2005. 212 с.

135. Нагайченко Н. Н. Воспитывающая среда школы как фактор формирования социальной компетентности старшеклассников. Ярославский педагогический вестник. 2010. № 3, т. П. С. 94–97.

136. Назаренко Л. В., Мельничук I. М. Зміст та структура професійної компетентності майбутніх медичних сестер. *Медсестринство*. 2014. № 4. С. 40–43.

137. Назарова О. Л. Управление качеством образовательного процесса в профессионально-педагогическом колледже: дис. ... д-ра пед. наук: 13.00.01. Челябинск, 2003. 460 с.

138. Насырова Н. Х. Проектирование подготовки студентов гуманитарных факультетов классического университета по информатике: автореф. дис. ... канд. пед. наук : 13.00.08 / Казан. гос. ун-т. Казань, 2000. 17 с.

139. Никуличева Н. В. Организационно-педагогическое обеспечение подготовки преподавателя для системы дистанционного обучения: дис. ... канд. пед. наук: 13.00.08. Москва, 2016. 229 с.

140. Новиков А. М. Научно-экспериментальная работа в образовательном учреждении (деловые советы). Москва: Ассоциация «Профессиональное образование», 1998. 134 с.

141. Новиков А. М., Новиков Д. А. Методология научного исследования. Москва: Либроком, 2010. 280 с.

142. Огієнко О. І. Інформаційні технології як засіб адаптивного навчання дорослих. *Інформаційні технології і засоби навчання*. 2010. № 6 (20). URL: <u>http://www.ime.eduua.net/em.html (да</u>та звернення: 02.08.2022).

143. Ожегов С. И. Толковый словарь русского языка : около 100 000 слов, терминов и фразеологических выражений / под общ. ред. Л. И. Скворцова. 28-е изд., перераб. Москва: Мир и Образование: ОНИКС, 2012. 1376 с.

144. Організація самостійної роботи студентів в умовах інтенсифікації навчання: навч. посіб. / А. М. Алексюк, А. А. Аюрзанайн, П. І. Підкасистий, В. А. Козаков [та ін.]. Київ : ІСДО, 1993. 336 с.

145. Орду К. С. Критерії, компоненти та показники інформаційнокомунікативної компетентності майбутніх сімейних лікарів. *Науковий часопис Національного педагогічного університету імені М. П. Драгоманова*. 2019. Вип. 70. С. 189–193.

146. Орду К. С. Формування інформаційно-комунікативної компетентності майбутніх сімейних лікарів у професійній підготовці : дис. ... канд. пед. наук : 015. Професійна освіта. Держ. закл. «Південноукр. нац. пед. ун-т імені К. Д. Ушинського». Одеса, 2021. 318 с.

147. Осадченко I. Аналіз поняття «дидактична система» у контексті педагогічних категорій. *Проблеми підготовки сучасного вчителя*: зб. наук. пр. Уман. держ. пед. ун-ту імені Павла Тичини. Умань: ПП Жовтий О. О., 2010. Вип. 1. С. 36–45.

148. Осова О. О. Дидактичні засади навчання іноземних мов студентів філологічних спеціальностей із застосуванням технологічних інновацій: автореф. дис. ... д-ра пед. наук: 13.00.09. Полтава, 2020. 43 с.

149. Осова О. О. Дидактичні засади навчання іноземних мов студентів філологічних спеціальностей із застосуванням технологічних

інновацій: дис. ... д-ра пед. наук: 13.00.09 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2020. 571 с.

150. Остраус Ю. М. Критерії, показники та рівні сформованості професійно-комунікативної культури майбутніх сімейних лікарів. *Наукові записки Вінницького державного педагогічного університету імені Михайла Коцюбинського. Сер.: Педагогіка і психологія*: зб. наук. пр. Вінниця, 2016. Вип. № 47. С. 96-102.

151. Остраус Ю. М. Педагогічні умови формування професійнокомунікативної культури майбутніх сімейних лікарів: дис. ... канд. пед. наук: 13.00.04 / Вінницький держ. пед. ун-т імені Михайла Коцюбинського. Вінниця, 2020. 336 с.

152. Пальчевський С. С. Педагогіка: навч. посіб. Київ : Каравела, 2007. 576 с.

153. Пашкова А. А. Формирование готовности преподавателей СПО к работе в условиях смешанного обучения: магистерская дис. / Уральский федеральный университет имени первого Президента россии Б. Н. Ельцина, Уральский гуманитарный институт, Кафедра общей и Екатеринбург, 2020. 86 c. URL социальной психологии. • http://hdl.handle.net/10995/86603 (дата звернення: 02.08.2022).

154. Педагогические системы, педагогические процессы и педагогические технологии в современном педагогическом знании / Г. Н. Алесандров [и др.]. *Образовательные технологии и общество*. 2000. № 3 (2). С. 134–148.

155. Педагогічний словник / за ред. М. Д. Ярмаченка. Київ: Педагогічна думка, 2001. 516 с.

156. Пєхота О. М. Підготовка майбутнього вчителя до впровадження педагогічних технологій: навч. посібник. Київ: Вид-во А.С.К., 2003. 240 с.

157. Плеухова Л. Структура и содержание мотивационного обеспечения обучающих программ. *Информатика и образование* 1991. № 3. С. 20–25.

158. Подласый И. П. Педагогика. Новый курс: учеб. : в 2 кн. Кн. 1. Общие основы. Процесс обучения. Москва, 2001. 570 с.

159. Полонский В. М. Словарь по образованию и педагогике. Москва: Высшая школа, 2004. 512 с.

160. Пономаренко О. В. Сукупність критеріїв та показників готовності майбутніх магістрів психології до професійної діяльності в умовах неформальної освіти за її компонентами. *Інноваційна педагогіка*. 2020. Вип. 24, т. 2. С. 99–104.

161. Потороко И. Ю. Системный анализ и принятие решений: учеб. пособие. Челябинск, 2010. 51 с.

162. Про вищу освіту : Закон України від 01.07.2014 р. № 1556-VII : станом на 27 жовт. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/1556-18#Text (дата звернення: 04.12.2022).

163. Про затвердження Національної рамки кваліфікацій : Постанова Каб. Міністрів України від 23.11.2011 р. № 1341: станом на 2 лип. 2020 р. URL: https://zakon.rada.gov.ua/laws/show/1341-2011-п#Text (дата звернення: 05.11.2022).

164. Про затвердження переліку галузей знань і спеціальностей, за якими здійснюється підготовка здобувачів вищої освіти: Постанова Каб. Міністрів України від 29.04.2015 р. № 266: станом на 24 лип. 2021 р. URL: https://zakon.rada.gov.ua/laws/show/266-2015-п#Text (дата звернення: 05.11.2022).

165. Про затвердження Положення про організацію освітнього процесу у закладах охорони здоров'я за участю науково-педагогічних працівників закладів вищої освіти, що здійснюють підготовку здобувачів вищої освіти у сфері охорони здоров'я: Постанова Каб. Міністрів України від 28.12.2020 р. № 1337. URL: https://zakon.rada.gov.ua/laws/show/1337-2020-п#Text (дата звернення: 06.10.2022).

166. Про освіту: Закон України від 05.09.2017 р. № 2145-VIII : станом на 27 жовт. 2022 р. URL: https://zakon.rada.gov.ua/laws/show/2145-19#Text (дата звернення: 05.12.2022).

167. Проєкт «Розвиток медичної освіти в Україні»: пріоритети на 2020 рік. URL: https://moz.gov.ua/article/news/proekt-rozvitok-medichnoi-osviti-v-ukraini-prioriteti-na-2020-rik (дата звернення: 02.08.2022).

168. Професійна освіта: словник : навч. посіб. / уклад. С. Гончаренко, за ред. Н. Ничкало. Київ: Вища школа, 2000. 380 с.

169. Прошкін В. В. Педагогічна система як предмет наукового дослідження. *Неперервна професійна освіта: теорія і практика*. 2015. Вип. 4. С. 7–12.

170. Психологічний словник / авт.-уклад. В. В. Синявський, О. П. Сергєєнкова; ред. Н. А. Побірченко. Київ: Науковий світ, 2007. 274 с.

171. Психологічний словник / за ред. В. І. Войтка. Київ: Либідь, 1982. 215 с.

172. Путляева Л. В. Современные психолого-педагогические проблемы профессионального обучения. Москва, 1990. 170 с.

173. Раков С. А. Сучасний учитель інформатики: кваліфікація і вимоги. *Комп'ютер у школі та сім'ї.* 2005. № 3. С. 35–38.

174. Родионов И. Б. Теория систем и системный анализ: курс лекций. URL: http://victor-safronov.ru/systems-analysis/lectures /rodionov.html (дата звернення: 04.12.2022).

175. Роман С. В. Науково-теоретичні основи побудови педагогічної системи формування еколого-гуманістичних цінностей у процесі шкільної хімічної освіти. *Науковий вісник Донбасу*. 2013. № 1. URL: http://nbuv.gov.ua/UJRN/nvd_2013_1_37 (дата звернення: 02.08.2022).

176. Савченко О. Я. Уміння вчитися як ключова компетентність загальної середньої освіти. *Компетентнісний підхід у сучасній освіті : світовий досвід та українські перспективи* /під заг. ред. О. В. Овчарук. Київ, 2004. С. 33–44.

177. Садовский В. Н. Основания общей теории систем. Москва : Наука, 1974. 279 с.

178. Свиридюк В. В. Формування інформаційно-комунікативної компетентності майбутніх магістрів медсестринства на засадах технологічного підходу: дис. ... канд. пед. наук: 13.00.04 / Житомир. держ. ун-т імені Івана Франка. Житомир, 2018. 347 с.

179. Селевко Г. К. Современные образовательные технологии: учеб. пособие. Москва, 1998. 255 с.

180. Семко Л. П. Компетентнісний підхід до навчання інформатики в основній школі. Наукові записки [Центральноукр. держ. пед. ун-ту імені Володимира Винниченка]. Серія: Проблеми фізикометодики мавтематичної i технологічної освіти. Кіровоград: PBB КДПУ ім. В. Вінниченка, 2013. Вип. 4. Ч. 2. С. 63-67.

181. Семко Л. П. Лапінський В. В. Інформаційні компетентності та шляхи їх формування. *Соціально-психологічні технології розвитку* особистості: зб. наук. праць за матеріалами V Міжнародної науковопрактичної конференції молодих вчених, аспірантів та студентів (м. Херсон, 14 травня 2020 р.) / ред. колегія : А. М. Яцюк, Н. О. Олейник, В. В. Мойсеєнко та ін. Херсон : ФОП Вишемирський В. С., 2020. С. 324– 327.

182. Сережнікова Р. К., Пархоменко Н. Д., Яковицька Л. С. Основи психології і педагогіки: навч. посіб. Київ: Центр навч. літ-ри, 2003. 243 с.

183. Сериков Г. Н. Образование: аспекты системного отражения. Курган, 1997. 464 с. 184. Сисоєва О. А., Гринчишина К. А. Формування цифрової інформаційної компетентності у майбутніх учителів технологій засобами мультимедіа. *Актуальні проблеми математики, фізики і технологічної освіти*: зб. наук. пр. Вінниця, 2010. Вип. 7. С. 356–358.

185. Сілкова О. В., Лобач Н. В. Формування інформаційно-цифрової компетентності у студентів закладів вищої медичної освіти. *Педагогіка формування творчої особистості у вищій і загальноосвітній школах.* 2021. № 74, Т. 3. С. 130–134.

186. Сластенин В. А., Исаев И. Ф., Шиянов Е. Н. Педагогика: учеб. пособие. 2-е изд., стереотип. Москва, 2002. 576 с.

187. Словник базових понять з курсу «Педагогіка»: навч. посіб. для студ. вищ. навч. закл. / уклад. О. Є. Антонова. Житомир: Вид-во ЖДУ імені Івана Франка, 2014. 100 с.

188. Словник іншомовних слів / уклад.: С. М. Морозов, Л. М. Шкарапута. Київ : Наукова думка, 2000. 680 с.

189. Словник української мови : в 11 т. / за ред. І. К. Білодіда. Київ: Наукова думка, 1970–1980. Том 4. 1973. 840 с.

190. Словник-довідник з професійної педагогіки / ред.-упоряд. А. В. Семенова. Одеса : Пальміра, 2006. 272 с.

191. Смолінчук Л. С. Тестування як метод оцінювання навчальних досягнень студентів. *Proceedings of the national aviation university. series: pedagogy, psychology*. 2010. Vol. 1, no. 3. URL: https://doi.org/10.18372/2411-264x.3.2146 (date of access: 05.11.2022).

192. Смолянинова О. Г., Савельева О. А., Достовалова Е. В. Компетентностный подход в системе высшего образования: монография. Красноярск: Изд-во Сибирск. федеральн. ун-та, 2008. 195 с.

193. Собченко Т. М. Дидактична система змішаного навчання студентів філологічних спеціальностей у закладах вищої освіти: дис. ...

д-ра пед. наук: 13.00.09 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2021. 568 с.

194. Солодовник О. В. Формування готовності майбутніх молодших спеціалістів з медичною освітою до професійного самовдосконалення у процесі фахової підготовки: дис. ... канд. пед. наук: 13.00.04. Житомир, 2017. 278 с.

195. Солошич І. О. Дидактичні засади формування дослідницької компетентності: дис. ... д-ра пед. наук: 13.00.09 / Полтав. нац. пед. ун-т імені В. Г. Короленка. Полтава, 2020. 581 с.

196. Сорока К. О. Основи теорії систем і системного аналізу: навч. посіб. Харків : ХНАМГ, 2004. 291 с.

197. Спірін О. М. Дидактичні засади організації освітнього процесу за кредитними технологіями. Вісник Житомирського державного університету імені Івана Франка. 2006. № 30. С. 41–45. URL: http://eprints.zu.edu.ua/1309/1/226.pdf (дата звернення: 28.02.2022).

198. Спірін О. М. Інформаційно-комунікаційні та інформатичні компетентності як компоненти системи професійно-спеціалізованих компетентностей вчителя інформатики. *Інформаційні технології і засоби навчання*. 2009. № 5 (13). URL: https://journal.iitta.gov.ua/index.php /itlt/article/ /view/183/169 (дата звернення: 18.12.2021).

199. Спірін О. М. Інформаційно-комунікаційні технології моніторингу впровадження результатів науково-дослідних робіт. *Інформаційні технології і засоби навчання*. 2013. Т. 36. Вип. 4. С. 132–152. URL: http://nbuv.gov.ua/UJRN/ITZN_2013_36_4_15 (дата зверення: 24.12.2020).

200. Спірін О. М. Теоретичні та методичні засади професійної підготовки майбутніх учителів інформатики за кредитно-модульною системою: монографія. Житомир: Вид-во ЖДУ ім. І. Франка, 2007. 300 с.

201. Спірін О. М., Новицька Т. Л., Лупаренко Л. А. Науковометодичний та координаційний супровід розвитку інформаційного освітньо-наукового простору України. *Комп'ютер у школі та сім'ї*. 2015. № 5 (125). С. 11–18.

202. Стандарт вищої освіти другого (магістерського) рівня, галузь знань 22 Охорона здоров'я, спеціальність 222 Медицина URL: https://mon.gov.ua/storage/app/media/vishcha-

osvita/zatverdzeni%20standarty/2021/11/09/222-Medytsyna.mahistr.09.11.pdf (дата звернення: 01.12.2022).

203. Старосельська Ю. І. Виховання відповідального ставлення до власного здоров'я студентів в умовах освітнього простору університету: дис. ... канд. пед. наук: 13.00.07. Харків, 2013. 182 с.

204. Стеценко И. А., Царева М. И. Формирование информационной компетентности студентов педагогического вуза. *Вестник Таганрогского государственного педагогического института*. 2012. № 1. С. 87–91. URL: https://cyberleninka.ru/article/n/formirovanie-informatsionnoy-kompetentnosti-studentov-pedagogicheskogo-vuza/viewer (дата звернення: 05.11.2022).

205. Стечак Г. М. Педагогічна підготовка майбутніх сімейних лікарів у медичному університеті: дис. ... канд. пед. наук: 13.00.04. Львів, 2017. 282 с.

206. Стечак Г. М. Структура педагогічної компетентності сімейного лікаря. *Професійна освіта: проблеми і перспективи*. 2016. Вип. 10. С. 38–42.

207. Стратегія розвитку медичної освіти / М-во охорони здоров'яУкраїни.URL:https://moz.gov.ua/uploads/1/8475-medical_education_analytics.pdf(дата звернення: 01.12.2022).

208. Тарасенко Р. О. Теоретичне обґрунтування моделі формування інформаційної компетентності майбутніх перекладачів для аграрної галузі.

Вісник Дніпропетровського університету імені Адольфа Нобеля. Серія «Педагогіка і психологія». Педагогічні науки. 2014. № 2 (8). С. 81–86.

209. Тверезовська Н., Філіппова Л. Сутність та зміст поняття "педагогічні умови". *Нова педагогічна думка*. 2009. № 3. С. 90–92.

210. Темербекова А. А. Информационная компетентность личности учителя как социально-педагогическая проблема, монография. Москва: Изд-во МГУ, 2008. 191 с.

211. Теория систем и системный анализ в управлении организациями: справочник / под ред. В. Н. Волковой, А. А. Емельянова. Москва: Финансы и статистика, 2006. 848 с.

212. Тітов С. В. Інформаційно-освітнє середовище навчального закладу: розвиток засобів і способів комунікаційної й інформаційної взаємодії. *Вісник Харківської державної академії культури*. 2014. Вип. 43. С. 144–150. URL: <u>http://nbuv.gov.ua/j-pdf/hak_2014_43_20.pdf</u> (дата звернення: 02.08.2022)

213. Ткачов А. С. Структурно-функціональна модель формування ключових компетентностей інтелектуально здібних і обдарованих учнів основної школи в процесі навчання. *Науковий вісник*: зб. наук. пр. Ужгород. нац. ун-ту. Сер.: Педагогіка. Соціальна робота. Ужгород, 2017. Вип. 1 (40). С. 286–289.

214. Ткачова Н. О. Аксіологічний підхід до організації педагогічного процесу в загальноосвітньому навчальному закладі: монографія. Луганськ–Харків, 2006. 300 с.

215. Ткачова Н. О. Аксіологічні засади педагогічного процесу в сучасних загальноосвітніх навчальних закладах: дис. ... д-ра пед. наук: 13.00.01 / Луган. нац. пед. ун-т ім. Т. Шевченка. Луганськ, 2006. 512 с.

216. Ткачук В. В. Діагностика рівня сформованості ІКТкомпетентностей майбутніх інженерів-педагогів комп'ютерного профілю. Наукові записки [Кіровоградського державного педагогічного

університету імені Володимира Винниченка]. Серія: Проблеми методики фізико-математичної і технологічної освіти: зб. наук. пр. / Кіровоград. держ. пед. ун-т ім. Володимира Винниченка. Кропивницький: КДПУ ім. В. Винниченка. Кропивницький : РВВ КДПУ ім. В. Винниченка, 2017. Вип. 11, ч. 2. С. 205–212.

217. Ткачук Г. В. Практично-технічна підготовка майбутніх учителів інформатики в умовах змішаного навчання: монографія. Умань: Видав. Сочінський М. М., 2018. 318 с.

218. Ткачук Г. В. Теоретичні і методичні засади практично-технічної підготовки майбутніх учителів інформатики в умовах змішаного навчання: дис. ... д-ра пед. наук.: 13.00.02 / Нац. педаг. ун-т імені М. П. Драгоманова. Київ, 2019. 447 с.

219. Тришина С. В. Информационная компетентность как педагогическая категория. Эйдос : интернет-журнал. 2005. № 9. С. 38–47. URL: http://www.eidos.ru/journal/2005/0910-11.htm (дата звернення: 02.08.2022).

220. Тришина С. В., Хуторской А. В. Информационная компетентность специалиста в системе дополнительного профессионального образования. Эйдос: интернет-журнал. 2004. URL: http://www.eidos.ru/journal/2004/0622-09.htm (дата звернення: 11.01.2022).

221. Ушаков Д. Толковый словарь. URL: https://ushakovdictionary.ru (дата звернення: 28.02.2022).

222. Философская энциклопедия: в 5 т. / ред. Ф. В. Константинов. Москва: Советская энциклопедия, 1964. Т. 5. 740 с.

223. Філософський енциклопедичний словник: енциклопедія / гол. ред. В. І. Шинкарук. Київ : Абрис, 2002. 742 с.

224. Філософський словник соціальних термінів / ред. рада: В. Андрущенко, Л. Губерський, В. Кремень та ін. Харків, 2002. 672 с.

225. Фролова О. А., Скородулина Е. Ю. Модель информационной компетентности студента в сегменте высшего медицинского образования. С. 23–26 URL: https://cyberleninka.ru/article/n/model-informatsionnoy-kompetentnosti-studenta-v-segmente-vysshego-meditsinskogo-obrazovaniya/viewer (дата звернення: 05.11.2022).

226. Хоботова Н. В. Мотиваційні моменти у виборі студентом майбутньої спеціальності «оториноларингологія». *Медичні науки*. 2018. № 10 (62). С. 145–147.

227. Хоменко П. В. Формування інформаційної компетентності майбутнього фахівця фізичної культури. *Педагогічна освіта: теорія і практика*: зб. наук. пр. / Кам'янець-Подільський нац. ун-т імені Івана Огієнка; Ін-т педагогіки НАПН України. Київ: Міленіум, 2013. Вип. 13. С. 158–161.

228. Шахов В. І. Базова педагогічна освіта майбутнього вчителя : загальнопедагогічний аспект: монографія. Вінниця, 2007. 383 с.

229. Шиян Н. І. Технологія модульно-рейтингового навчання у вищій педагогічній школі. *Реформування освіти і школи: сутність, проблеми, перспективи*. Рівне: Тетіс, 1997. С. 191–192.

230. Штофф В. А. Моделирование и философия. Ленинград: Наука, 1966. 302 с.

231. Шушарина Е. С. Формирование межкультурной компетенции студентов-иностранцев на основе технологии смешаного обучения: дис. ... канд. пед. наук: 13.00.08 / Воронеж. гос. техн. ун-т. Воронеж, 2018. 192 с.

232. Щебликіна Т. А. Теоретико-методичні засади моніторингу навчальних досягнень студентів гуманітарних спеціальностей вищих педагогічних навчальних закладів: дис. ... д-ра пед. наук: 13.00.09 / Харк. нац. пед. ун-т імені Г. С. Сковороди. Харків, 2016. 589 с.

233. Яйлаханов С. В. Информационная образовательная среда как объект педагогического исследования. URL:

<u>http://www.superinf.ru/view_helpstud.php?id=133</u> (дата звернення: 02.08.2022).

234. Яцишина О. В., Мельничук І. М. Особливості професійної підготовки іноземних студентів вищих медичних навчальних закладів. Науковий вісник Ужгородського університету: Сер.: Педагогіка. Соціальна робота. Ужгород: Говерла, 2013. Вип. 27. С. 119–121.

235. Bloom B. S., Krathwohl D. R. Taxonomy of Educational Objectives. The Classification of Education Goals by a committee of college and university examiners. Handbook I Cognitive Domain. New York: Longmans Green, 1956.

236. Ferrari A. Digital competence in practice: an analysis of frameworks. Luxembourg, 2012. 95 p.

CONCLUSIONS

The monograph theoretically provides a new approach to the problem of information competence formation in international medical students in the educational environment of university. The results of the research have approved the correctness of its initial conceptual statements and the hypothesis, that made the foundation for such conclusions:

1. The analysis of scientific research in different areas allowed us to determine the state of the scientific development of the problem of information competence formation.

2. On the basis of scientific literature analysis, the conceptual and categorical apparatus of the research is determined, various approaches to defining the concept "information competence" and the other close to it concepts are analyzed and generalized.

3. The problem of information competence formation is comprehensively researched and solved on the methodological level on the basis of system-synergetic, competence-oriented, personality and activity oriented, axiological, hermeneutic, context, environmental approaches.

4. In the process of the scientific search, it was found out that the education of international students in higher education of Ukraine has its own specifics, due to significant differences (sociocultural, linguistic, psychological, religious, academic etc.) between participants in the educational process. Therefore, to ensure the effectiveness of this process, it is necessary to ensure effective adaptation of foreigners to the new conditions of their life, as well as to develop and put into practice effective educational and methodological support.

5. It is found out that the basic requirements for training future physicians are determined on the basis of the analysis of the field of knowledge given in the Standard of Higher Education 22 Health care of the specialty 222

Medicine for the second (master's) level of higher education of compulsory competencies that should be mastered by medical students at the magistracy level, in particular the following: integral, general, special (professional, subject). It should be noted that one of the general competencies is that the future physician is able to effectively use information and communication technologies.

6. It was clarified that in the context of the integration of national higher education into the European and world educational space, it is important to take into account global trends in the development of medical science and organization of the educational process of medical students, the quality of training process for future medical workers, as well as to improve the work of medical education institutions.

7. It has been stated that modern requirements for the education of foreign students of medical specialties reflect the general requirements for the organization and implementation of the educational process in a modern higher school, specific requirements for training applicants for higher medical education and at the same time specific requirements for the education of foreigners in a domestic institution of higher medical education, due to the peculiarities of working with them and the need to ensure their readiness to effectively perform the professional duties of a doctor in their homeland or in other countries.

8. It is determined that the changes that are taking place in the field of national medical education (joining the European and world educational space; introduction of new requirements for the implementation of the accreditation procedure by the National Agency for Quality Assurance in Higher Education; the development of the National Qualifications Framework (description of qualification levels) led to the introduction of competence-oriented approach in medical education. In light of this, the role, meaning and principles of competence-oriented approach in medical higher education are outlined. They

are aimed at achieving the main goal and objectives of the process of teaching medical students.

9. In the study it is determined that the educational environment of the university institution is an integral set of material and sociocultural factors, specially organized in this institution psychological and pedagogical conditions that determine the course of the educational process and ensure the formation of foreign students of medical specialties as competent specialists and comprehensively developed personalities. It was also concluded that this environment includes the following components: spatial-semantic, content-methodical and organizational-communicative.

10. In accordance with the author's concept, a didactic system of information competence of foreign students of medical specialties in the educational environment of the university was developed, which includes the following units: predictive and targetive (social demand, purpose, objectives); conceptual and methodological (scientific and methodological approaches, functions of the system, principles of formation of information competence in international medical students); theoretical and content-oriented (structural components of information competence of international medical students); activity-oriented and procedural (stages of formation of information competence of international medical students, pedagogical conditions); resultative and evaluative (criteria, indicators, levels, diagnostic methods and diagnostic methods, as well as the expected result of system implementation).

11. Pedagogical conditions ensuring the effective formation of information competence are substantiated: training of teachers for the formation of informational competence of future foreign doctors; creation of a special informational and educational environment taking into account modern requirements for the professional activity of medical workers, involvement of foreign students in the self-diagnosis of information competence.

12. Criteria for evaluating the effectiveness of a developed system are specified, that include motivation-targetive, cognitive-operational, personalaxiological and corresponding indicators; levels of formation of information (initial, basic, creative), competence diagnostic tools (observations, conversations, testing, questionnaires, independent assessment, selfassessment), special diagnostic methods, as well as the expected result of the implementation of the developed system.

13. Educational and methodical support is developed for realizing the didactic system of information competence formation in international medical students.

НАУКОВЕ ВИДАННЯ

DAVYDOVA Zhanna Монографія

INFORMATION COMPETENCE FORMATION IN INTERNATIONAL MEDICAL STUDENTS: THEORY AND PRACTICE

Анлійською мовою

Відповідальний за випуск: Алексєєва М.І. За авторською редакцією Комп'ютерне верстання: Шепеліна Г.Ю. Дизайн:Пчельнікова І.М. Коректура тексту: Олексенко О.О.

Підписано до друку 21.12.2022. Формат 60×84/16. Папір офсетний. Гарнітура Cambria. Цифровий друк. Умовно-друк. арк. 6,63. Тираж 300 екз.