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THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF INFORMATION CULTURE FORMATION OF FUTURE SPECIALISTS IN LIBRARY, INFORMATION AND ARCHIVAL SCIENCE

The purpose of the study is to examine the process of developing this culture among students in relevant specialties, analyze the main methodological approaches, and develop effective strategies to ensure their competence in the modern information environment. The study employed methods such as analysis of scientific sources, experimental testing, observation, and comparative analysis. Particular attention was given to the practical components of the training, including interactive classes, work with electronic databases, digitization of archival materials, and the creation of bibliographic descriptions. The results of the experiment demonstrate significant differences between the students in the control and experimental groups. It was found that students who participated in additional training and courses significantly improved their skills in working with information resources and their ability to systematize them. While the average score in the control group increased only from 50 to 65, the experimental group showed an increase from 55 to 85 points. This highlights the high effectiveness of interactive methods, particularly the use of case studies, simulation programs, and project activities. Information culture is a systemic quality of an individual, encompassing the ability to manage information resources, critically evaluate their quality, and apply them in professional activities. Both hard skills and soft skills play crucial roles. The developed approaches to the formation of information culture integrate these elements and contribute to the training of competitive specialists capable of adapting to changes in a dynamic information environment. The conclusions emphasize the importance of adopting modern teaching methods that include practical work with information systems, the development of digital competence, and the enhancement of students' ethical responsibility. This approach fosters not only the individual development of future professionals but also the overall improvement in the quality of work with information resources across society.

Key words: informational culture, library, information and archival science, students, education, soft skills, hard skills, professional education.

Introduction. The formation of an information culture among future specialists in library, information, and archival science is an important stage in the training of professionals who will work in the field of information management. An information culture is an integral part of professional competence that affects the effectiveness of performing tasks and ensuring high standards of service in information institutions. It includes knowledge, skills, abilities, and values that are formed during the learning process and contribute to the development of the ability to work with information, analyze it, synthesize it, and apply it properly.

The purpose of the article is to study the process of forming an information culture among future specialists in information, library, and archival affairs, to identify the main approaches, methods, and strategies that contribute to the development of key competencies in this area. It also aims to reveal the importance of an information culture as a component of professional training, to identify the main challenges and problems that arise in the process of its formation, and to outline the prospects for the development of curricula and approaches aimed at improving the efficiency of information work, ensuring the availability and preservation of information resources, as well as adapting future specialists to a rapidly changing information environment.

An information culture is defined as a set of knowledge, skills, and abilities that allow a person to effectively receive, evaluate, organize, use, and create information in various forms and formats. This concept includes both intel-

lectual and ethical aspects that influence a person's behaviour when working with information flows. In the field of information, librarianship, and archives, an information culture is the basis for ensuring effective work with documents, databases, information systems, and other sources of information.

Analysis of relevant research. Many Ukrainian researchers have studied the problems of information culture formation in education, but the focus of their attention is mainly on the formation of an information culture in future specialists in physics, mathematics, and information science. This creates gaps in the study of the training of future specialists in other fields, such as library, information, and archival studies. This unevenness in research can lead to insufficient attention to the needs of students in this specialty regarding the formation of an information culture, which requires the adaptation of educational and training programs.

Gurevych offers an expanded understanding of the concept of "information culture." In his opinion, it is not only technical knowledge and practical skills, but also the ability to adapt to the specifics of the information society. This approach emphasises flexibility, innovation, and critical thinking, which are extremely important in the context of rapid technological development [Gurevych].

Koval interprets information culture as a complex, multidimensional phenomenon that encompasses not only technical and technological aspects, but also much broader requirements for the professional activity of a modern person. She emphasises that this concept is an integral part of professional culture, which reflects the readiness of a specialist to work in the information society. An information culture includes a new style of thinking, as well as the ability to integrate knowledge and technology to achieve a holistic scientific outlook based on the principles of information technology [Koval].

The author pays special attention to the social and communicative aspects, noting that an information culture defines a qualitatively new type of information and computer interaction. This applies not only to communication, but also to management, the organisation of experimental and research work, and legal activities in the context of rapid technological development.

Information culture, according to Koval, is a means of human adaptation to the realities of modern society, where information and its processing have become the basis for the functioning of many spheres of life. It reflects the ability of specialists not only to use technology, but also to think systematically, critically evaluate information, and thus meet the demands of a fast-moving information environment.

Koriakovtseva considers information culture as an important component of general human culture, which not only ensures the ability to work effectively with information flows, but also contributes to the self-development of the individual and influences the development of society as a whole. According to the researcher, mastering the mechanisms of information exchange allows an individual not only to adapt to the conditions of informatization, but also to actively participate in the formation of a collective information culture. Thus, the scholar emphasises a two-way process: the individual uses the opportunities of the information society for their own development and at the same time influences its information environment [Koriakovtseva].

Fedorova approaches the definition of information culture from the point of view of its practical orientation. She emphasises that it is, first of all, a set of stable skills and motivations that allow a person to effectively use the achievements of modern information technologies. Fedorova emphasises that information culture is formed not only through the acquisition of knowledge, but also through the continuous improvement of practical skills in the use of technology to achieve professional and personal goals [Philosophical Encyclopaedic Dictionary].

Both researchers agree that information culture has a dual impact: it not only transforms individual human activity, but also contributes to broad changes in society. This approach emphasises the interconnection between the individual and collective aspects of information culture, as well as its dynamic nature, which allows for adaptation to the requirements of the modern information environment.

Personal information culture is defined as the ability of a person not only to operate with information resources, but also to understand their essence and significance in the cognition of the world and in creative activities. It implies a deep understanding of information processes,

including data collection, analysis, processing, and use. This approach points to the integration of cognitive and practical skills that become the basis for effective work in the information environment.

An important aspect of information culture is the ethical component, which is reflected in the ability to foresee the consequences of one's own actions in the information space. A person with a high level of information culture not only knows how to use information resources, but also realizes their responsibility for their use. Adherence to the norms of behaviour that meet the public interest is a key marker of the maturity of the individual in the information society [Nychkalo].

The formation of the information culture of future specialists in library, information, and archival science involves the development of both soft and hard skills. Soft skills include communication, critical thinking, teamwork, and adaptability. They contribute to effective interaction with users, flexibility in solving information problems, and the ability to grow professionally in the face of dynamic change [Shlenova]. Hard skills include knowledge and skills in the field of information technology, data systematization, digital archiving, and legal aspects of information activities. Their development is ensured through mastering modern software products, information management methods, and compliance with international data standards. The balance between these components forms a specialist capable of meeting the modern challenges of the professional sphere [Shlenova].

It can be concluded that information culture appears not only as a set of technical and technological skills, but also as a systemic quality of a person that includes knowledge, skills, ethical principles, and the ability to harmoniously combine individual and public interests in the information sphere.

The methodological foundations for the formation of information culture include a set of approaches that contribute to the development of students' not only theoretical knowledge but also practical skills. These approaches are based on the integration of interdisciplinary knowledge that combines elements of information technology, library science, archival science, and information management. This allows students to develop a systematic approach to working with information, as well as the ability to adapt to new conditions that arise in the course of their professional activities.

The basis of the methodological approach is interactive and problem-based learning methods that encourage students to actively participate in the learning process and search for information on their own. One of the most effective tools is the case method, which allows students to consider real-life situations from the practice of working in libraries, archives, and information centres, analyse them, formulate solutions, and justify their positions. This contributes to the development of critical thinking, analysis, and decision-making skills, which are important components of information culture.

The use of modern information technologies in the educational process is an integral part of the methodological foundations of information culture. Interactive platforms, modular courses, webinars, and simulation programmes allow students to gain practical experience with information systems that are actively used in real professional activities. The relevance of these methods is increasing due to the integration of technologies that provide access to a wide range of resources and facilitate the completion of tasks based on real data. Involving students in project activities, working with information databases, and creating their own information products stimulates the development of their professional skills and increases the level of information competence.

Of particular importance is the development of students' ability to effectively evaluate information according to the criteria of reliability, relevance, and authenticity. This helps to avoid the spread of fake information and promotes a responsible attitude toward information resources. To do this, it is necessary to use methods that focus on information ethics, address copyright, confidentiality, and ethical behaviour in the digital environment.

The formation of the information culture of future specialists in library, information, and archival science requires careful research based on experimental work with students. We have conducted an experiment that includes several stages, which allows us to assess the initial level of information culture, introduce innovative teaching methods, and determine their effectiveness.

Research Methods. To ensure in-depth research and obtain objective results, the experi-

ment used several key methods, each of which played an important role in identifying the dynamics of changes and assessing the level of information culture of the study participants. In particular, testing, as one of the main tools, was implemented through the distance learning system of National Aerospace University "KhAI". The test tasks were developed taking into account the specifics of the studied competences and were aimed at diagnosing the basic knowledge, skills, and abilities that form the information culture. This system ensured the standardization of testing, which made it impossible to be subjective in the assessment process and allowed maintaining the objectivity of the data obtained.

The observation method was used to directly analyse the learning activity of the respondents during the tests and in the learning process in general. This made it possible to capture important details of behaviour that could have been overlooked when analysing quantitative indicators alone. Observation allowed us to see how participants interact with the system, what strategies they use when working with learning materials, and how they respond to challenges and tasks that arise in the learning process.

The analysis of test results played a critical role in determining the effectiveness of the experimental activities. For this purpose, we compared the average scores obtained by the participants before the experiment and after its completion. This comparison allowed us to assess not only the overall progress of the respondents, but also to identify the key areas where the most significant changes had occurred. The analysis of the results also included correlations between different indicators, which allowed us to obtain a holistic picture of the dynamics of information culture formation.

Results. Students of the 2nd-4th year of the specialty "Library, Information and Archival Science" (a total of 70 students) took part in the experiment 'Formation of Information Culture of Future Specialists in Library, Information and Archival Science'. The students were randomly divided into two groups: experimental and control. Both groups were equal in the number of participants. The experimental group consisted of 35 people, who participated in additional training activities for the development of information culture during the academic semester. The control group consisted of 35 people, who studied according to the standard program without additional training activities.

Prior to the experiment, both groups were tested to determine the level of initial knowledge using a closed-form multiple-choice test consisting of 20 questions, with 5 points awarded for each correct answer, for a maximum score of 100.

The average score of the entrance test in the control group was 50, and in the experimental group was 55 points.

During the academic semester, the experimental group organized a set of additional training activities aimed at developing the participants' information culture. These activities were carefully planned to cover the main aspects that are critical for mastering modern information technologies and methods of working with information. In particular, much attention was paid to training sessions where participants acquired practical skills in working with electronic databases. They not only learned how to search for information by various parameters, but also became acquainted with the specifics of various platforms, their interfaces, the use of filters, and the principles of saving search results for future use. The courses on organizing and digitizing archives were aimed at broadening the participants' understanding of the processes involved in transforming physical documents into digital format. Participants were shown how to work with software for scanning, organizing, and storing data in the form of electronic archives. In addition, special emphasis was placed on the importance of ensuring reliable storage of information and compliance with ethical and legal norms governing copyright issues in the context of digitization. Practical exercises on bibliographic description and information retrieval allowed participants not only to master the methods of creating a correct bibliographic description, but also to deepen their understanding of algorithms for effective information retrieval in various sources. Particular attention was paid to the correct formatting of references to sources and the analysis of various types of information, from scientific articles to statistical reports. Participants had the opportunity to put their newly acquired knowledge to practical use in solving specific tasks, such as compiling bibliographies or writing annotations. Participants also had the opportunity to share experiences, get advice from teachers, and complete tasks that brought

them as close as possible to real-life information handling.

The control group received traditional training without interactive elements and additional activities. At the end of the experiment, the level of students' information culture was re-diagnosed in both the experimental and control groups. For this purpose, the same test methods were used as at the beginning to ensure comparability of results. This made it possible not only to assess changes in the level of competence, but also to draw conclusions about the impact of specially designed educational activities on the formation of the information culture of future specialists in the field of library, information, and archival studies.

Conclusion. The results showed a significant difference between the groups. In the control group, which studied the standard curriculum, the average score of the final test was 65, which was almost the same as the initial score. This indicates that the level of information culture of students in this group remained almost unchanged. In contrast, in the experimental group, where students participated in additional training, workshops, and courses, the average score rose to 85. This significant progress demonstrates the positive impact of targeted additional training focused on the development of information competencies.

It is particularly important that the students in the experimental group not only improved their results but also demonstrated a deeper understanding of the principles of working with information. They became more confident in using electronic databases, systematising information, and making bibliographic descriptions. The skills of digitising archives and managing information resources have become not just theoretical knowledge, but practical tools that they can use in their professional activities.

Table 1

List of test questions

№	Questions	Maximum number of points for a correct answer
1.	Choose the most effective method for searching for a scientific article in an electronic database.	5
2.	Choose the correct order of steps to create a bibliographic entry for a scientific article.	5
3.	What should be done to ensure effective access to electronic archival materials?	5
4.	If you are a librarian and your user needs to find information on the topic 'History of Ukraine,' which of the following sources is the most relevant?	5
5.	Choose the most convenient way to organize an electronic file cabinet in the library.	5
6.	How can an archivist ensure the safety of an ancient document?	5
7.	If the library needs to automate the information processing process, what software would be most suitable?	5
8.	Which of the following is the main stage in conducting an information search in scientific databases?	5
9.	If you have a large archive of documents that need to be digitized, what is the best way to organize the work?	5
10.	How do you properly fill out an application for an information search in a library system?	5
11.	How can an archivist ensure the safe storage of digital copies of documents?	5
12.	What steps should be taken to ensure convenient access to electronic library resources?	5
13.	How should the work of the library be organized to ensure information literacy among users?	5
14.	How can an archivist properly organize the description of archival materials?	5
15.	How do you choose the right format for preserving digitized archival documents?	5
16.	How do you properly fill out an application for an information search in a library system?	5
17.	How can an archivist ensure the safe storage of digital copies of documents?	5
18.	What steps should be taken to ensure convenient access to electronic library resources?	5
19.	What measures should be taken to organize library information resources in the context of digitalization?	5
20.	What should an archivist do when working with confidential archival documents?	5
Total		100

The experiment convincingly proved that the development of information culture requires the integration of modern teaching methods that include not only traditional lectures but also active practical work. A systematic approach to developing such competencies as information literacy, digital competence, analytical thinking, and the ability to work with modern information systems is essential for training competitive professionals.

These results also confirm that interactive teaching methods, which involve real interaction of students with information resources and technologies, contribute to better knowledge acquisition and development of practical skills. The participants of the experimental group showed not only a higher level of competence but also greater self-confidence and readiness to solve professional problems in a dynamic information environment. Thus, the introduction of innovative approaches in the educational process should become one of the priorities of training modern specialists.

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ТЕОРЕТИКО-МЕТОДИЧНІ ЗАСАДИ ФОРМУВАННЯ ІНФОРМАЦІЙНОЇ КУЛЬТУРИ МАЙБУТНІХ СПЕЦІАЛІСТІВ З БІБЛІОТЕЧНОЇ, ІНФОРМАЦІЙНОЇ ТА АРХІВНОЇ СПРАВИ

Метою дослідження є вивчення процесу розвитку цієї культури у студентів відповідних спеціальностей, аналіз основних методологічних підходів і розробка ефективних стратегій для забезпечення їхньої компетентності в сучасному інформаційному середовищі. У дослідженні застосовувалися методи аналізу наукових джерел, експериментального тестування, спостереження та порівняльного аналізу. Особливу увагу було приділено практичним компонентам навчання, які передбачали інтерактивні заняття, роботу з електронними базами даних, оцифрування архівних матеріалів та створення бібліографічних описів. Результати експерименту демонструють суттєві відмінності між студентами контрольної та експериментальної груп. Виявлено, що студенти, які брали участь у додаткових тренінгах і курсах, значно покращили свої навички роботи з інформаційними ресурсами та здатність до їхньої систематизації. У той час як у контрольній групі середній бал зріс лише з 50 до 65, експериментальна група продемонструвала зростання з 55 до 85 балів. Це свідчить про високу ефективність інтерактивних методів, зокрема використання кейс-методів, симуляційних програм та проектної діяльності. Інформаційна культура виступає

системною якістю особистості, яка включає здатність оперувати інформаційними ресурсами, критично оцінювати їхню якість та застосовувати в професійній діяльності. Важливу роль відіграють як тверді (hard skills), так і м'які (soft skills) навички. Розроблені підходи до формування інформаційної культури забезпечують інтеграцію цих елементів і сприяють підготовці конкурентоспроможних фахівців, здатних адаптуватися до змін у динамічному інформаційному середовищі. Висновки підкреслюють важливість впровадження сучасних методів навчання, які включають практичну роботу з інформаційними системами, розвиток цифрової компетентності та підвищення етичної відповідальності студентів. Такий підхід сприяє не лише індивідуальному розвитку майбутніх фахівців, але й загальному підвищенню якості роботи з інформаційними ресурсами в суспільстві.

Ключові слова: інформаційна культура, бібліотека, інформаційна та архівна справа, студенти, освіта, soft skills, hard skills, професійна освіта.