FORMATION OF INFORMATION COMPETENCE IN THE CONDITIONS OF LIBRARY EDUCATIONAL ENVIRONMENT

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Abstract

In the formation of information competence, the primary role is played by a «specially designed educational environment based on the interaction of the library and the educational institution». Therefore, each library has the opportunity to prepare an information-competent personality, even without resorting to the development of all sorts of new teaching methods for the formation information competence, but improving its educational environment, taking into account the need to raise this level. And, despite the fact that the process of creating an environment that will nourish information competence longer than the development of a new teaching methodology, the results will be more ambitious, since the environmental methodology is synergistic.

Keywords: information competence, library educational environment, educational resources, information requirements, scientific research.

The information competence(IC) of the higher education student, future specialist, and the process of its formation are discussed in a rather large number of researches: A.V. Khutorskoy, I.A. Zimnyaya, O.B. Zaitseva, N.A. Voinova, M.A. Holodnaya, Yu.I. Askerko, D.V. Golubin, A.V. Goferberg, etc. Analysis of various approaches to the interpretation of this concept shows that it is not uniquely defined today. Information competence is considered, on the one hand, as a component of professional competence (G.B.Golub, E.F.Morkovina, K.V. Shaposhnikova), and on the other hand, as a component of the personal information culture (G.B. Parshukova, N.V. Zbarovskaya, N.I. Gendina). From the position of information competence as the professional training component of a modern university graduate (a position supported by our research), one can speak of information competence as a readiness for self-education, the ability to identify gaps in their knowledge and skills in solving a new problem, to assess the need for information for one's own activities, carry out information retrieval and retrieve information from various sources on any media. All this allows you to flexibly change your professional qualifications and, independently master the knowledge and skills necessary to solve the tasks. Also here one can note the readinessto use information resources, ability to make reasoned conclusions, use

information to plan and carry out their activities, which allows a person to make informed decisions based on critically comprehended information [3].

The analysis of instructional and methodological materials (curriculum documents, manual for graduate students on the basics of information culture) showed that the content of information competence and the range of knowledge included in it were thoroughly studied by researchers. A number of works are devoted to the consideration of various techniques used by practical librarians in the formation of information competence. But the trend of recent years is the outflow of library users, including university students, which indicates a lack of understanding of the role and place of he modern library in creating an individual user information field. This fact is a direct proof that existing approaches to the formation of information competence do not bring proper results. A student, a future specialist, should consider the library as one of the priority channels of access to relevant and reliable information necessary for his successful educational and, in the future, professional activities. Therefore, libraries should seek new methodological approaches that would help to identify alternative ways to solve the current problem. At this stage, we propose to address the provisions of the environmental approach and consider it as a methodological basis for formation the information competence of the future specialist, since they fully reflect the practical aspects of the functioning of the modern library of institutions of higher education.

According to A.A. Temerbekova, the environmental approach is appeared, first of all, in connection with the consequences of the influence of the environment, and also in connection with the motivation of information activity as a consequence of certain, including information requirements [6]. Drawing on the provisions of the environmental approach at the adaptation stage (when the student visits the university library for the first time) it is important to ensure that the user ceases to perceive the conditions of the library educational environment as being rigidly imposed from outside and not taking into account his individual information requirements. The possibility and necessity to continuously pursue a goal-seeking choice, personally meaningful goal-setting, the manifestation of subjectivity in the circumstances of educational activity, the non-linearity of the movement to the result in conditions of multifactorial interaction with the environment, becoming everyday practice, in fact, are characteristic features of the environmental approach by opinion of A.G. Timofeeva [5]. That is, the management of information and educational resources and the effectiveness of educational activities are conditioned by the motivation generated by the application of the environmental approach. The interaction of the library user separately with each of the elements of the environment cannot give those results that interaction with the environment as a system. As a systemic result of such interaction, one can call the user's understanding of his ability not only to use the potential of the environment, but also to influence it, which motivates him and raises the level of satisfaction. Thus, the reflexive activity is included in the canon of the environmental approach: the comprehension and analysis of library content in comparison with alternative sources of information. And, consequently, the library educational environment becomes a visual tool of competent training or the formation of information competence.

In the formation of information competence, the primary role is played by a «specially designed educational environment based on the interaction of the library and the educational institution» [1]. Therefore, each library has the opportunity to prepare an information-competent personality, even without resorting to the development of all sorts of new teaching methods for the formation IC, but improving its educational

environment, taking into account the need to raise this level. Here we can talk about the system of visual user orientation, the systematic identification of their information requirements, skills; disclosure of funds; organization of service areas; complex measures for information support, developed taking into account the saturation of the library with various educational resources. It is possible to evolve the intellectual potential of the individual in the library through independent search, development and use of the necessary information resources, which requires the organization of comfortable conditions for joint activities of both the user and the librarian. In real conditions, the library of the modern university has a set of tools for developing a system of student interaction both with traditional reference and information funds and with complex reference-providing information system and network information resources. And, despite the fact that the process of creating an environment that will nourish information competence longer than the development of a new teaching methodology, the results will be more ambitious, since the environmental methodology is synergistic.

The main purpose of the library educational environment (LEE) is to create conditions for improving the quality of education, access to education, ensuring the effectiveness of the educational process and the competitiveness of higher education institutions through the means of organizing proper information support. According to V.A. Krasilnikov «the environment must be continuously changing, taking into account the individual characteristics of the user, the range of his interests, the process of independent search, facilitate the formulation of tasks and the search for ways to solve them, ensure the process of continuous growth of a person in professional and general education» [4]. In the course of the theoretical study, we have identified the structural and functional components of the LEE, the proper organization of which will allow us to create the proper pedagogical conditions for the library to realize its educational function and to form an information-competent personality. Such an organization implies that the environment should be built taking into account the educational goals and programs of the institution in whose structure the library is located, and also to focus on the information requirements of its users. Of great importance is not only the content aspect, but also the implementation of the educational requirements of users, since they were identified as one of the system-forming structural and functional elements of such environment.

For example information requirements of university students are including: 1) the most comfortable conditions for remote work with the resources of the library; 2) educational materials in electronic form; 3) information for passing the exams and assessments (in this case only a part of the document is of interest); 4) information for preparation for the state exam and qualifying research paper; 5) information about which books are on hand, which books were taken earlier and to which electronic documents were accessed; 6) access to change or addition of their personal data; 7) a list of new disciplines for the year and a list of education materials on them; 8) the ability to make an author's assembly of text snippets from existing books [1].

In the context of the multiformat information resources, the development of electronic libraries and the reform of the higher education system, modern physical media and virtual environments are combined in modern LEE, which again indicates the growing role of information competence, which is not only a component of successful teaching and learning, but also an integrating element of a single information and educational environment (SIEE), associated with the individual characteristics of man. At the same

time, information competence is not in some fixed state, but develops and is updated with the development of the environment, i.e. the process of its formation is carried out.

The process of formation of information competence is continuous, in which cognitive, motivational-value, technical-technological, communicative and reflective components are combined; a set of interacting principles; organizational and pedagogical conditions; forms and methods of interaction of subjects and objects (library staff and users, who can act as subjects and as objects of library interaction).

Self-education and personal development of the individual in the conditions of the library educational environment presuppose the formation of personality qualities that allow to effectively operate in modern sociocultural conditions, such as psychological flexibility, the ability to process and selectively absorb new information, the ability to adapt to changing economic, social and psychological conditions in society, state, in personal destiny.

The quality of the library educational environment can be determined on the basis of whether it meets the needs of the user, and also the extent to which the LEE realizes the goals and tasks that stand before the library in general and the institution of higher education in whose structure it is located. The first criterion for assessing the quality of the library educational environment can be defined as the degree of user satisfaction with those products and services that are implemented in the existing environment. Also, the library educational environment can be assessed from the point of view of the functional effectiveness of its structural and functional components and the design of the prospects for their development. As such components we have allocated information and educational resources; organizational and administrative structures and communication means.

The impact of the environment on the user can be determined by how his behavior changed during interaction with the environment: did he learn to do something from what he did not know before? When studying the impact, you can focus on improving the user's perception of the environment. But from our point of view, it is most important to trace the changes in his behavior and the acquisition of new skills and abilities.

The inciting factors in studying LEE are the rapid growth in the technical equipment of students and the elimination of the main contradiction – the availability of information resources accumulated by the library, which are not claimed by users.

We conducted scientific research aimed at revealing the satisfaction of modern users of the educational environment created in the library and the way in which it influences the formation of the information competence of the students.

To the dimensional characters of the environment, which can be considered as the criteria for the satisfaction of the LEE, we attributed: – activity: opportunities for the cognitive and transformative activity of the users; – organizational: spatial characteristics of the environment, the quality of the organization of the environment, subsidiarity, sequence in the organization of its structural and functional parts, precision and clarity of management; – informational: availability of resources for self-development and self-management of the person during stay in the environment; – dedicated training of librarians and their competence.

The research supposal is formulated as follows. The modern student prefers the global network Internet as an alternative source of information, therefore, despite the fact that

libraries of higher education institutions are in a better position than public libraries, since each student is a potential user, attendance in them also falls. Therefore, the library needs to look for new ways and approaches for organizing and optimizing the educational environment in order to preserve the contingent, as attracting readers is an important factor in the viability, success and sustainability of the library development.

A questionnaire was selected as a method of research. A single questionnaire was prepared for the students of the Faculty of Mechanics and Technology of the Belarusian National Technical University (BNTU) and Vitebsk State Technological University (VSTU) (standard questionnaire technology) for the survey. Statistical processing of the data revealed the following results, expressed in quantitative relationships and allowed to draw a number of conclusions. The main purpose of visiting the library of higher education institution remains traditional: preparation for training. This confirms the legitimacy of considering information and educational resources as one of the key components of the educational environment of the library. With respect to information sources, the Internet is the first place for a modern user. The lack of understanding of the importance of using special kinds of documents (patent, normative and technical documents, industrial catalogs, etc.) during the training testifies that students are little familiar with the structure of the industry document flow. These results suggest that the library from the position of the main information center should not only organize access to its resources, but also create certain knowledge among users that will help understand the structure of modern information and educational resources, as well as show the advantages of using them in comparison with other sources of information.

The insufficient formation of practical skills in the implementation of information retrieval activity by modern students has been identified, since they prefer to use adapted information that is in the public domain on the Internet. The percentage of those who can search in the library databases of turned out to be less than to search in the electronic catalog (EC). This indicates that librarians pay less attention to this topic in both information culture classes and in the process of consulting work. This is also confirmed by the analysis of the curriculum in the discipline «Information Culture». And as a result, students are afraid to refer to this relatively new product of the library. The interrogation revealed a low percentage of calls to the databases of the library and a lack of skills to work with them. This shows that the library needs to carry out more extensive work to popularize this information resource. There is also the assumption that the majority of respondents do not have long-term information requests, and they do not need constant information support from the library in the form of electronic mailing. The question of the web representation of the library, in which the library site was studied, showed that the most popular resource is the electronic library (information repository). Such sections as virtual reference and virtual exhibition are practically unclaimed. Also the development of the web 2.0 technology does not bring the expected results to the library. Basically, users are interested in information of news and reference nature. Advertising and consulting, thanks to which the library can position itself in the information market, remains unclaimed.

In terms of information competence in general, the research revealed the following gaps: insufficient knowledge of the search methodology in library catalogs, using computer-aided procedures, ignorance of the rules of bibliographic entry of scientific work and methods of analytical and synthetic information processing. These weaknesses should be eliminated by the library, as this is its educational function, which is considered compulsory for the university library. The library can continue to focus

on information culture classes, and can move to a qualitatively new level: by all means of the library educational environment, it is necessary to form an information competent person. As positive results of the research, we noted the following: 1) students do not refuse printed publications, preferring to use both traditional and electronic resources in parallel. It was suggested that there is an electronic analogue of the document in case of insufficient copy of the printed publication in the library's fund; 2) the majority of respondents feel comfortable enough in the modern information and educational environment and are able to satisfy their information requirements. But at the same time, this result also indicates that the library should take certain measures to become a necessary link in the implementation of educational activities by modern users.

Reluctance to apply for information in the library can be explained by the fact that students are not confident enough in the LEE. In terms of comfort, the following wishes were expressed: access to all types of information in one place, separate workplaces, the availability of recreation areas. At the same time, workplaces must be automated and with access to the library's databases and the Internet. Open access to the library fund is welcome. All this shows that the library should move away from the usual conservatism and organize service areas in the light of reader preferences. The library should be convenient and comfortable, above all, the users. The material and technical base also needs to be improved.

The attitude to the library on the part of the users has changed. First of all, they see in ita service institute, access to the resources of which must be organized twenty-four-hour. Therefore, when working development plans in order to improve the quality of services and attract users, to modernize traditional forms and methods of work that maximize the satisfaction of information requirements, the library should be guided by these results.

Based on the results of the above, we are working on the development of a number of activities that include measures to attract readers and Internet users to the library, and proposals to increase the level of information competence of students through the library educational environment. For this purpose, work is planned in four main directions:

– use of the remote work with readers and distributed information technology through the workstation (smart-library), which will provide the opportunity to flexibly manage information services and organize personalized services: by categories, interests and requests of users;

– reorganization of the system of user services and storage of funds, providing for the creation of a single reading room with a single point of issue of documents; comfortable service areas with a Wi-Fi network; automated workplaces for working with electronic resources; exhibition area (exhibitions of new acquisitions, thematic exhibitions, exhibitions of scientific achievements, including in virtual format);

–work to improve the skills of library staff engaged in organizing the library educational environment and carrying out the formation of information competence of library users

–getting of new knowledge and skills by specialists in the use of modern technologies and information and educational resources in information and library services;

– Internet marketing (the site of the library as a marketing platform for attracting users: adaptive design, adaptive content, real-time marketing, mobile search, storytelling, Online Value Proposition).

Thus, the above-mentioned measures should contribute to the formation of users' understanding that the library educational environment is the most optimal for the creation and use of information resources, the development of information and communication technologies, the employment of new technological platforms for implementing modern methods of providing, processing and structuring information.

References

[1]   Agibova, I.M. *Conditions and factors of the organization of effective independent work of students using information and communication technologies* / I.M. Agibova, T.A. Kulikova // Bulletin of the Pomor University. Series «Humanities and Social Sciences».– 2010. – N 5.

[2]   Baryshev, R.A *Experience of developing a smart-library at the Siberian Federal University: first results* / R.A Baryshev // Higher education today. – 2016. – N. 1. – P. 60–64.

[3]   Kopytov, M.A. *On the key competences from the point of view of the result of the education process* / M.A. Kopytova // Gifted children and improving education. – 2008. – N. 2. – P. 57–61.

[4]   Krasilnikova, V.A. *Information and communication technologies in education: textbook* / V.A.Krasilnikova. – Orenburg.– GOU OSU, 2006. – 235 p.

[5]   Timofeeva, A.G. *The main characteristics of the environmental approach to primary ecological education* / A.G. Timofeeva// Izvestiya Saratov University. New episode.Acmeology of education.Developmental psychology.– 2010. – T. 3, N. 1. – P. 74–80.

[6]   *Formation of information competence in the regional educational environment* / A.A. Temerbekova [and etc.]. –Gorno-Altaisk: GASU, 2011. – 225 p.