Methods of organizing library scientific research

Sayyora GOYIBOVA¹

Namangan State University

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**ABSTRACT**

This article provides detailed information about the scientific methodology of librarianship, general scientific and special scientific methods of librarianship, and methods of organizing organizational structures for research in the field of librarianship.

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Kutubxonashunoslik ilmiy tadqiqotlarini tashkil etish usullari

**ANNOTATSIYA**

Ushbu maqolada kutubxonashunoslikning ilmiy metodikasi, kutubxonashunoslikning umumiy ilmiy, xususiy ilmiy usullari, ushbu sohadagi tadqiqotlar uchun tashkiliy tuzilmalarni tashkil etish usullari haqida batafsil ma'lumot berilgan.
Методы организации библиотечного научного исследования

**Ключевые слова:** библиотека, наука, библиотечное дело, метод, книга, процесс, поле, исследование, систематический метод, индукция, дедукция, цель, явление.

**АННОТАЦИЯ**

В данной статье представлена подробная информация о научной методологии библиотечного дела, общенучных и специально-научных методах библиотечного дела, методах организации организационных структур для проведения исследований в области библиотечного дела.

**Introduction.**

Over the past period, the Republic of Uzbekistan has adopted a number of normative and legal acts on the development of culture and arts[1]. In particular, the Resolution of the President of the Republic of Uzbekistan No. PD - 3391 of November 17, 2017 “On measures to further developing the art of the Uzbek national makom”, of May 30, 2019 “On the organization of the activities of the state museum-reserves Sarmishsay”, “Shakhrisabz”, “Termez” and “Kokand” Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No. 443 of April 21 [2], 2020 “On measures to further increasing the efficiency of the fine and applied arts” Resolution No. PD - 4688 of May 26, 2020 “Culture Decree No. PD6000 of May 23 [3], Decree No. PD-5349 of the President of the Republic of Uzbekistan of February 19, 2018 “On measures to further improving the field of information technologies and communications” [4], Decree of the President of the Republic of Uzbekistan dated August 11, 2017 “Further improvement of management in the press and information sector” on Decree of the President of the Republic of Uzbekistan No. PD-5148 [5], Decree of the President of the Republic of Uzbekistan of September 13, 2017 “Development of the publishing and distribution system of book products, increase and promotion of book reading and reading culture on the program of comprehensive measures on the issue” PD-3271 [6], The President of the Republic of Uzbekistan of August 17, 2017 “On further improvement of the activities of the Press and Information Agency of Uzbekistan” PD-Decision No. 3223 of the President of the Republic of Uzbekistan of February 2, 2019 “Information under the Administration of the President of the Republic of Uzbekistan “On the organization of the activities of a mass communications agency” Decision No. PD-4151, the President of the Republic of Uzbekistan dated June 7, 2019 “Further improvement of the provision of information and library services to the presidents of the Republic of Uzbekistan” on Decision No. PD-4354 is becoming increasingly important.

**Main part.**
All areas are currently developing in our society. In particular, it can be observed that the use of various methods in conducting scientific research in the field of library science is increasing.

The scientific methodology of librarianship is a set of methods used to study the problems facing this discipline.

The method is a part of the composition of scientific knowledge, which represents its object, the subject of analysis, research tasks, and the tools necessary to solve them.

The scientific method represents abstract ways and tools of knowledge used in the process of scientific knowledge. The method of scientific knowledge arises on the basis of human practical activity.

Library science methods are divided into general scientific and special scientific methods according to their use. The following general scientific methods are widely used in the process of modern scientific knowledge, as well as in librarianship:

- Observation is a method of sensory knowledge of things and events in reality, aimed at a specific goal.
- Measurement is a method of determining the quantitative description of an object in the process of cognition.
- Comparison is a method of studying the differences and similarities of one thing or event from another thing or event and their relationship.
- An experiment is a way of researching and studying phenomena in science by trying them out in an experiment.

The methods of knowledge that we have considered are almost the methods of knowledge that are characteristic of empirical evidence. An object can be created not only through experience but also directly through abstract thinking:

- Abstraction (abstract imagination) is a method of mentally knowing the properties, relations, and stages of development of an event. In the analysis, the studied thing and phenomenon, the idea is divided into small parts elements, and connections between them, interaction, and influence are studied.
- Synthesis based on the results of analysis, studies the overall quality of things and events. Synthesis is a method of re-establishing the elements that were mentally divided as a result of analysis, combining them, and mentally creating the previous whole. (for example information-library activities).
- Induction and deduction are the main forms of mental inference and represent the movement of thought from the known to the unknown in the process of cognition.

Induction is a method of discussion used to draw general conclusions from some intellectual knowledge. The deduction is a logical method leading from the general to the specific.[7] Modeling is a scientific method based on the indirect study of existence. Modeling is based on the similarity and compatibility between the object under study and its model. The method of systematization is the study of a set of elements that are interconnected in a certain way and form a certain integrity. This method is widely used in the current process of scientific knowledge, in the scientific knowledge of complex objects. Based on this method, general connections and relations of the studied or searched object with another object are revealed.

An accuracy method is a tool for theoretical generalization as a multifaceted unit of properties, connections, and relations of the research object. This method reveals the knowledge of reality, which includes all connections and relationships about concrete
events. The method of abstraction is a means of knowing about the essence of concrete reality. Thinking itself can be considered as a way of knowing reality with the help of imagination.

The method of imagination is the most important way to learn about the subject. With the tool of imagination, the essence of important properties and relationships in a certain relationship is revealed. The method of imagination reflects the events of reality more deeply and more accurately. Based on this method, the researched object is mentally analyzed and divided into abstract definitions.

The axiomatic method is a method of making theoretical conclusions based on axioms. Hypothetico-deductive method - the basis of this method is not an axiom, but a set of experimental data. A hypothesis method can be confirmed or proven wrong in scientific research through experiments. A hypothesis directs the process of scientific research in a certain direction and helps to collect new evidence and information. The method of historicity and rationality is a method of knowing the important features of the development process of the objective world. Historicity is a method of knowing the time, period, exact emergence, and development of things and events. It is necessary to study each event from a historical point of view, based on concrete experience.

A logical method is a method of researching the content of the subject in a theoretical form. This method allows us to find out the most important relations of the research object. The exact content of our knowledge is formed in the process of learning. Forecasting (foresaying, predicting) is a quantitative assessment of some events or phenomena using various special methods or indicating changes in certain periods (for example, the development of information-library activities by 2020 concept).

The structural-functional method is the study of the whole part into component parts through a systematic analysis of phenomena and processes. In this case, each part of the content will have a certain task.[8]

Classification is the separation of objects into interrelated classes according to certain characteristics. In this case, each class has a certain permanent place, and in turn, it is divided into small classes. The classification method includes dividing libraries into types, systematization, objectification, etc. is an example.

Along with general scientific methods, private methods are widely used in librarianship. Some of them have potential as universal methods but are not yet widely used. Others are used only in this field. Let's briefly touch on them:

Sociological research methods. It is now widely used in library studies. It includes a survey and an interview. With the help of sociological research methods, social opinion on events and processes is collected. Methods of randomly determining the size of sociological research in librarianship research are of great importance. These methods ensure the representativeness of the research, that is, coverage. The optimal solution of the number of respondents (the number of participants in the research) is solved by mathematical formulas, using nomograms and tables of large numbers.

Questionnaire. This is the collection of primary information on objective and subjective facts among the interviewers. A questionnaire allows the researcher to obtain specific facts, processes, and events, as well as reasons, plans, and reasons. A questionnaire is an important channel of “feedback”. It is important for the researcher to be objective when analyzing and reporting the results of the questionnaire.
Content analysis method. The modern method of content analysis (content analysis) studies messages (verbal, written, electronic), the author's message, the content and forms of the message to the audience, and the results of the impact of the content on the audience. (It should find answers to the following questions: Who is speaking? What is he speaking? To whom is he speaking? With what results?) Meaningful units (units of observation) are identified in the messages from the researcher's point of view, and then the level of their use is determined. Based on this analysis, the hypothesis made at the beginning of the research is confirmed or rejected.

Quantitative methods. Elements of quantitative methods are used in library studies. This indicates that the trends of mathematization are entering the science of library science. Accordingly, librarianship is becoming a qualitative-quantitative science, which increases the potential of knowledge.

Statistical tables. The use of statistical tables has become a tradition in librarianship. The statistical data in the tables make it possible to clearly and clearly see the results of primary research.[9]

Indexing methods. Indexing methods (indicators, lists) are also used in librarianship research. With their help, dynamic series are given in absolute numbers, in the form of relative and average amounts, and various events and objects (book reading, fund turnover, growth rate, etc.) are compared.

Correlation analysis method. Librarians often resort to the method of correlational analysis. If it is determined whether or not there is a relationship between the studied factors with the help of tables, graphs, then in the correlation analysis, the correlation relationship, that is, the forms and accuracy of the relationship (the amount of free time the population spends on using library books) (density) are studied.

Quantitative (mathematical) methods. Library science is considered a powerful tool for learning subjects and phenomena. But it should not be absolutized and turned into a goal.

Scientific research is primarily free thinking, free from rigid boundaries or administrative control. The organization of scientific research works means that the researcher carries out scientific research works following the sequence of the main stages of conducting scientific-research works in order to achieve the intended results.

Conclusion.

The stages of organizing scientific work can be simple: "problem and its solution", as well as three-stage: "research-development-implementation". There are also often fragmented approaches: "problem-hypothesis-proof-theory creation-conclusions and practical recommendations". In practice, the following organizational structure is considered the most convenient for research in the field of library science.

1. Defining a scientific problem and formulating it
2. Development and approval of the technical task
3. Development of a scientific research program
4. Formalization of scientific research results
5. Implementation of the results of scientific research.
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