

Significance of Developing Skills in Scientific Literature for Professional Education of Future Specialists

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Abstract: This article will talk about the professional education system, reforms and innovations, the renewal of the educational system, and the formation of skills to be able to work with scientific resources, in particular, the formation of skills to work with scientific literature in students. The article will extensively analyze the modern professional education system and the issue of specialist training.

1 INTRODUCTION

The 21st century is characterized by the development of Science and technology, the flow of information, and the struggle of ideas. Progress in science is causing reforms in every field, particularly in education. The educational system is being updated today under the influence of technical means and methods. This in turn gives a number of responsibilities to the teacher and student who are subjects of the educational process.

In fact, it can be said that the introduction of the development of Science and technology into the modern professional education system has created several facilities for today's specialists. Today, without leaving the room, you have the opportunity to instantly search, find, and read the necessary information within the framework of your field through technical means or modern gadgets. It can be said that the size of the information flow, and the ease of use of information, combined with a radical change in the educational system, somewhat complicated it.

It can be said that today, in the course of a lesson in the higher education system, within the framework of any course or subject, the speaker's speech is largely of a referential nature. The reason is, that the main information in the field of Science and the

subject is not obtained through the teacher's speech, but if the main current ideas and problems of the topic are introduced, the main theory and content should be established based on independent research. It is said that the lecture is not the Genesis-suicide of the study of Science in the modern educational system today. As the first ideas and concepts are formed during the lecture session, the very beginning of the work on acquiring knowledge and bringing it to the level of skills and competencies is considered a lecture lesson.

A properly and effectively organized lecture session is also not today considered the limit of knowledge that can be obtained and should be mastered in science. Real knowledge and competence are achieved in the process of independent activity of the student, working with scientific articles, textbooks, and literature, and thinking deeply about them.

It is this issue that is considered one of the pressing problems today, in my opinion. Even if today the student fully listens to the lecture session that the teacher studied, understands it, and then finds information on science or topic from the pages of the internet, speaking them in oral observation in the process of a seminar or practical training, this does not mean that he has yet mastered this knowledge. Maybe he just found information on some topic and kept that information in memory, took the

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information from one source, and brought it to a second stream. A real specialist must be required to be the head. Learning a single piece of information and communicating it does not mean that it is knowledge.

The skill of working with scientific literature today remains one of the main and pressing problems in many areas. The reason is, the speed and abundance of information flow, and the possibility of its easy acceptance, almost eliminated the skills of working with scientific literature, and reasoning. The teacher today believes that the task of a teacher-educator operating in the modern system of specialty and professional education is not to receive the information he conveys through feedback orally or in writing, but to appreciate its quality, and to provide information that motivates new knowledge, to direct the student to scientific research, and the main thing is to form in it the skills. Especially for high-school students who are at the height of scientific research, this process has tremendous significance. They use the skills of the correct use of scientific sources, the formation of ideas and concepts about the scientific worldview, scientific research, and the introduction of students to such concepts as scientific point of view, hypothesis, theory, and research.

It is known that for one host, not one, but several hypotheses are usually put forward. In some cases, some of them deny each other. This is not considered a nuisance, since the presence of different hypotheses requires analysis in different areas, which provides the basis for the serious implementation of the scientific unualization process. By proving or denying a certain thing, the scientist is looking for a novelty. Regardless of whether the hypothesis is confirmed or not, kholda helps to track down the truth. An incorrect hypothesis also benefits, the reason being that in the process of negating it, the paths leading to khaqqat are opened. If the hypothesis is confirmed, it becomes a scientific theory.

Not every knowledge is scientific. Scientific knowledge reveals the laws of interaction and occurrence of hosts and predicts their further progress. The validity of scientific knowledge is guaranteed by absolute verification in practice. Scientific theory is said to be the highest form of Organization of theoretical knowledge. It combines basic ideas and hypotheses in a particular field into a single system. The criterion of validity of the theory is practice. Scientific theories based on the knowledge of the objective laws of nature and society provide an opportunity to foresee what will happen in the future as a result of these laws.

A scientific theory is a system of knowledge that explains the sum of certain premises justifies all the laws put forward and unites the laws opened in the

same Soha into a single basis. For example: relativity, quantum theory, state and Hook Theory.

The main signs of scientific theory include:

- Scientific theory is the knowledge of a specific subject or a group of hosts that are very specific and organically linked together;

- As the main sign of the theory, it is important not to explain a certain sum of evidence, to describe it simply, but to reveal the course and development of the laws in it;

- The theory must have predictive power, predict the course of processes;

- In a developed theory, all its general laws must be united into a single preamble, and have a single basis.

- All laws that are part of the theory must be justified.

The structure of a scientific theory is formed from the basis of the theory, the laws from which its conclusion is calculated, concepts that reveal the main content of the theory, and an idea that combines the image of an objective being with the practical tasks facing humans.

In the modern system of higher professional education, a student as an active subject has the opportunity to freely share his opinion and comments. It should be understood that Fak cannot be formed both as a development and as a scientific worldview and as a specialist, only through independent thought. In order to develop independent thought and thinking, the student's independent activities must be properly organized. It also has a good effect of charring one's own opinion, establishing an independent educational process in mastering knowledge in the field, and providing the results of activities to the teacher's control for control.

From this point of view, the student's cognitive activity, that is, his ability, is measured by the level of his mental development. The criterion that determines the ability to know includes the speed of mastering, the flexibility of the thinking process, and the specific components of thinking. The concept of cognition in general is close in essence to the concept of mental abilities. General mental abilities embody a complex of all the abilities required in the student's educational activities. This includes the ability to preserve the student's educational material in memory, creative thinking, and the ability to perform logical actions. These abilities are classified into different classes in psychology and are interpreted differently.

Students' educational qualifications are formed in the process of independent work with educational materials. In other words, educational qualifications are acquired in the reception, and processing of educational material, separation of its important aspects, linking newly acquired knowledge with the previous ones, generalizing, repeating educational

knowledge, and solving issues with their implementation in practice. Thus, educational qualifications are associated with all educational and cognitive activities of students in the educational process.

Any form of educational work requires training qualifications, for example, such as hearing a teacher's lecture, performing practical tasks, working with test assignments, and qualifications for independent work. In the process of students gaining independent knowledge of Science, the first thing that is required is the qualification of independent work. Such a qualification is formed in the process of independent work with educational materials. In other words, educational qualifications are acquired in the reception, and processing of educational material, separation of its important aspects, linking newly acquired knowledge with the previous ones, generalizing, repeating educational knowledge, and solving issues with their implementation in practice.

One of the tasks of the higher education system is the formation of a scientific worldview and level. Therefore, in this regard, the student has stated his independent opinion and the existence (reasoning) of his independent opinion on an issue or problem is lacking. It is necessary to train the student to work with scientific data, and phrases, to correctly and appropriately apply them in professional activities. The student must read scientific literature, to have a deeper understanding of the opinions and theories in them and to be able to express critical opinions about them, as well as to express reflection and observation. Only then will we be raising not just a graduate, but a specialist whose field is understood by *chukur*.

To reflect the importance of the process of working with scientific literature in the upbringing of the future specialist, a survey was carried out among students and professors of Higher Education.

The survey in which the product was compiled consisted of two parts, the first part of which was initially conducted. According to the result of the first part, the image of a student of today who is studying for "educated" or excellent grades has become iconic. According to him, almost 87% of professors and students above 95% defined a student who does not leave classes, whose memory can deliver back the verbal information that the teacher gives, who is always ready for the course process, as a "knowledgeable" and future good specialist.

In the second part of the questionnaire, 3 different definitions were now given to the image of an educated student. Naturally, now professors and students have recognized the image of a student who can not only constantly attend classes, but also work tirelessly on himself, master science with the help of basic and additional literature, not only accept well-

known theories in science, but also look at them critically.

The future specialist should conduct scientific research and engage in professional creativity to improve his professional knowledge. Therefore, in the process of organizing scientific creativity, it is necessary to correctly distribute scientific activities.

Working with literature is a complex process that involves three stages: 1) choosing literature, 2) studying a book, 3) drawing conclusions, and keeping a record. At each stage of working with a book, a certain level of Information Culture is formed, which is determined as follows: 1) the sum of knowledge, skills, and abilities necessary for the existence of information in the World; 2) the method of Human Life; 3) the methodology for working with all types of information. Mastering the information culture allows the student to reliably continue his development as a specialist in his future practical activities and as a person in a rapidly developing information society. There is systematized information of a scientific or practical nature, presented in a convenient form for studying educational literature. The content of Educational Publications in the field of Science includes not only knowledge, but also methods of obtaining them, not only ideas and skills, but also methods of their practical use.

Research on scientific literature is recommended to start with a review of publications (books and journals) in the last 5-10 years. This will help determine the most important work within scientific sources. Then it is advisable to refer to the signs of recommendation, the literature presented in encyclopedias and reference books. Only then should the range of publications be expanded, referring to the most complete and scientific bibliographic signs, so as not to miss what is important for the relevant topic. Regardless of the year of publication in scientific research, it is necessary to know all the special literature on the topic. A graduate student, on the other hand, should strive to understand from his subjects not only highly specialized literature, that is, the literature of the subject or subject under study, but also the scientific direction in which the work is carried out.

In conclusion, we can say that the formation as a competency specialist in his field is determined not only by having deep professional knowledge but also by contributing to the development of his field, constant research, and making reforms. It is such a specialist that serves the prosperity of society and the state. To formulate the above professional qualities and characteristics, each future specialist should have the skills of being able to work with scientific sources, sorting information, and critical analysis in mastering special disciplines and professional

knowledge in the field. Also, students achieve deep knowledge in science, and creative search in the process of independent research, while it is advisable for the teacher, in turn, to constantly update the didactic materials he has prepared in science and try to make a productive, effective profit in his lesson with a scientific, creative approach.

In order to successfully master the research activity, the student must study the published scientific work in the study of working with scientific literature. This work is called "analysis of the state of the question under study". This is not an easy task, because humanity has collected so much information in the last two centuries that even in the narrow field of Science, the researcher can literally drown in many publications. The correct selection of sources of information and its targeted study are an important part of the professional qualifications of the researcher.

The study of literature, manuscripts, documents, materials in electronic media, and other sources as a tool containing facts describing the history and current state of the object being studied serves as a research topic, a way of identifying "white spots", creating preliminary ideas and preliminary concepts about uncertainties in the development of the question. Careful study of literature helps to distinguish the known from the unknown.

At this stage of scientific creation, the student should study the main paths leading to literary sources and get an idea of important literary resources, such as monographs, collections, journal articles, brochures, reviews, educational and methodological manuals, as well as dissertations, and abstracts.

The search for the necessary literature is a long-term work. Its importance is great since the quality of the thesis will depend on the completeness of the study of the published material. Catalogs are lists of books available in library holdings available in the form of brochures or cards.

Literature published on the topic of the thesis begins with the development of an idea. A monograph is the scientific work of authors with one or more single points of view, which involves the comprehensive theoretical study of a single problem or topic. A collection of scientific articles is the publication of the works of one or more authors, who often consider one scientific problem from different points of view. The journal article is a small-scale scientific work in which the problem is considered by substantiating its relevance, theoretical and practical significance, describing the methodology and results of research.

A dissertation is a scientific work performed in the form of a manuscript, scientific report, published

monograph, or textbook and serves as a qualification work to achieve a scientific degree.

To master as large a layer of literary materials as possible, you need to be able to read quickly. The following types of Reading are distinguished: bibliographic, visual, introductory, learning, analytical-critical, and creative.

Bibliographic reading is the viewing of catalog cards, recommendation lists, aggregated lists of journal articles for the year, etc. The purpose of such reading is to find sources that may be useful in post-bibliographic description work.

Bibliographic reading is used to find materials that contain the necessary information. Usually, they apply immediately after working with a list of catalogs and literature, since with their help the reader can only assume that the book of this name or article contains information of interest to him. For the final solution of the question, it will be necessary to consider the selected materials, and their individual parts (table of contents, abstract, introduction, conclusion).

Introduction reading involves reading selected articles, books, their chapters, and individual pages in full, with sufficient attention. The goal is to get acquainted with the essence of information in general, to understand what questions are asked to be considered by the author; to sort the material into something important and insignificant, and to highlight points worthy of special attention. After such a reading, the source does not contain new and necessary information or is left for study.

Reading involves a thorough assimilation of the selected material during acquaintance with articles, and books. In the process of such reading, the reader's confidence in the author, his willingness to accept and assimilate all the information proposed, a complete understanding of the material, and an attitude to assimilation are carried out.

Analytical, critical, and creative reading are two types of reading that are close to each other. The first of them involves a directed critical analysis of information; the second is the search for judgments, facts in which one's thoughts are expressed.

To get an idea of the main issues related to the chosen topic, the study of literature on the selected topic should be started with general work, and then look for new material. The study of scientific literature is a serious work. Therefore, you need to make extracts by reading an article or book with a pencil in your hands. If the magazine or book has its copy, then you can make notes on the edges. This will significantly facilitate the search for the necessary materials in the future.

It is advisable to study scientific publications in stages:

- * general acquaintance with the whole work on its content;
- * quick view of all content;
- * reading in order of sequence of material;
- * selective reading of any part of the work;
- * extract

When studying literature, you do not need to strive to borrow only material. In parallel, you need to consider the information found. This process should be carried out throughout the entire work on the topic, then their own thoughts, which appeared during acquaintance with the works of other people, serve as the basis for obtaining new knowledge.

In the study of literature on the chosen topic, not all information in it is used, but only information that is directly related to the topic of the thesis and is therefore the most valuable and useful. Thus, the criterion for assessing reading is the possibility of its practical use in the thesis.

When studying literary sources, you need to carefully monitor the design of the extracts so that they are easy to use in the future. When working on any personal issue or section, it is necessary to constantly see its connection with the problem as a whole and develop an extensive problem, disassemble it, and consider each of them in detail.

The student must collect only scientific facts and not any facts. The concept of "scientific fact" is much broader and more versatile than the concept of "fact" used in everyday life. When talking about scientific facts, they are understood as elements that form the basis of scientific knowledge, reflecting the objective characteristics of things and processes. Based on scientific facts, the laws of phenomena are determined, theories are built and laws are issued.

Scientific facts are characterized by such characteristics as novelty, accuracy, objectivity, and reliability. The novelty of a scientific fact speaks of a fundamentally new, as yet unknown topic, phenomenon, or process. This, of course, is not a scientific discovery, but a new knowledge of what we have not known so far. The accuracy of a scientific fact is determined by objective methods and characterizes the totality of the most important characteristics of objects, phenomena, and their quantitative and qualitative definitions.

2 SUMMARY

This article will talk about the professional education system, reforms and innovations, the renewal of the educational system, and the formation of skills for working with scientific resources, in particular, the formation of skills for students to work with scientific literature. The article analyzes in detail the problem

of specialist training and issues of modern vocational education.

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