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THE MAIN FEATURES AND USAGE OF SCIENTIFIC RESEARCH METHODS IN PEDAGOGY

Amirova Damira Begaliyevna
English teacher at Uzbekistan State World Languages University,
Tashkent city, Uzbekistan.

Ilyasov Erbol Ilyasovich
Geography teacher of the specialized school named after Al-Khorazmi

Abstract: This article is based on informing basic facts and providing essential information about research methods and ways that can be utilized in pedagogy. The most essential aim of education is enhancing the quality of teaching that is completely crucial today. There are many important and innovative teaching methods that are used in teaching and learning. In pedagogy, there are interactive, innovative and scientific methods that can be conducted by teachers to emphasize on improving students' foreign language awareness. This paper can be useful to get basic information related to research methods for teaching languages.

Key words: Research methods, teaching method, pedagogical processes, research, education system.

"Method" as a scientific concept in the broadest sense is the way to achieve a particular goal, in the narrowest sense in order to know the phenomena and laws of nature and social life indicates a method of solving a task. Knowing the objective world, what to learn in theory, who and how to educate. There are issues that are inextricably linked. The science of pedagogy is enriching and updating its essence existing pedagogical phenomena and processes to its goals and objectives learns in appropriate ways. In general, pedagogy in practice, a great wealth of teaching methods and techniques collected. Different conditions in choosing them, the science being taught character, age characteristics of children, level of prior preparation etc. are taken into account.

The research method of this science is to educate the younger generation, specific to the real processes of knowledge making and teaching a set of internal ways, methods and tools. Pedagogy the more correctly the research method of science is chosen, the more education updating and improving the content will increase to the same extent. However, it should be noted that the system of research methods so far in science that is not created, not solved.

The available methods are mainly:

• method of studying the literature;

• observation method;

• conversation method;

• a way to study children's creativity;

• method of analysis of school documents;

• experimental, test method;

• test method;

• method of statistical data analysis;

• mathematical and cybernetic methods;

• method of sociological research.

"The teaching method is theoretical and practical for teachers and students is a way to accomplish the educational tasks of learning." - says Professor R.A. Mavlonova. She follows the reading methods and sets specific requirements:

1. Teacher-recommended way to study the material, dialectical-materialist way of thinking, independent views,

volitional should lead to the formation of characteristics and behavior. In view of this requirement, the method should be educational in nature.

2. The scientific basis of the reading method must be clear and concise. Only then will the teacher know what the issues are through this method and what issues can be addressed can know that it will not.

3. The systematic nature of teaching determines its effectiveness.

4. Comprehensibility of the teaching method: the way of teaching is the student to be adopted and applied for the study of the study material and the method should be in accordance with the possibilities of acquiring knowledge should.

5. The need for awareness and activism in teaching is very serious demand.

6. Attention to the accuracy and validity of knowledge.

7. Correspondence of theoretical and practical phenomena in teaching methods.

Any kind of method is intended to achieve a goal and so he set some goal, to achieve it how to do it, to help you do it requires knowledge of the means by which it is given. In a word, pedagogical based on teacher and student behavior as a result of the method, students gain knowledge, talents and skills to raise their worldview, thinking and spirituality they achieve. It is based on thinking about behaviors related to education analysis is the only method in pedagogy and didactics. "The Great Didactics" by Jan Amos Comenius, by K.D. Ushinski said that such is the case in The Man as a Subject of Education approach can be seen. Everybody should draw attention to the serious conclusions about the educational process based on observations, experiences, facts based on the results of empirical studies. The method of studying the literature is the study of pedagogical literature works of thinkers and enlightened pedagogical scientists, reflecting national and universal values in the process, independent To the economy, ideology and spirituality of Uzbekistan Literature, works of the President of Uzbekistan IA Karimov, research textbooks, monographs, pamphlets and articles on the subject, pedagogical and psychological research, dissertations on the research topic studied, generalized, inferred. Also, there are many essential research methods in pedagogy that can be related to creating new atmosphere, novelty and new ideas in science. They are:

Observation methods - Observation begins with a review of the literature. The observation is organized by the researcher with a goal in mind. Monitoring is planned, its program is developed. In this case, the observation speed, number, address, time, status tracking, material recording duration is determined. Tracking is divided into two types according to the duration: short- and long-term follow-up. A brief observation is the daily of the object draw definite conclusions from changes in activities. Long term based on the purpose, plan and program of the observation, a certain scientific, final conclusion is reached. The final record of the follow-up filming, video recording, television and other techniques tools can be used. Proper use of the observation method increases the efficiency of the educational process, new creative begins to work.

Conversational method is an aspect or event of a research topic that is oral questions with specific individuals in order to learn about is the process of getting information from them. Inquiries are subject must have a logically meaningful, orderly, clear expression and the result is determined by composing it, depending on whether it is right or wrong. Conversation that is also possible to be interviewed during the method process. Reasonable, logical high responses or inaccurate responses are recorded on magnetic tapes and analyzed.

Pedagogical experiment is the basis of any pedagogical research. Scientific hypotheses using pedagogical experiment reliability is checked, between some elements of pedagogical processes and relationship. Pedagogical experiment is divided into two types: recorder and formative. Note existing in the process of education or upbringing through an experiment problems are identified. It is necessary in a formative experiment data are shaped in students. Pedagogical process the process organized by the experimenter himself in order to study more accurately observes. It is involved in the pedagogical process, the trainees create certain conditions of educator activity. Pedagogical experimental initial data, specific conditions, and training clearly define the methods or materials to be studied, as well as requires comprehensive consideration of the experimental results.

The following are the stages of a pedagogical experiment: conducting an experiment and interpreting the results, planning, experimenting setting goals and objectives, influencing the outcome of the experiment determining the amount of triggers and their level, the necessary observations number, procedure of experiment, verification of the obtained results methods. It is planned to organize and conduct the experiment should be carried out in strict accordance with the plan. Comment data will be collected and processed at this stage. Experiment the following conditions for the transfer to meet the principle of reliability to be followed:

1. Accuracy of the number of inspectors and the amount of experiments.

2. Reliability of research methods.

3. Take into account the statistical significance of the differences. Interaction of different methods of pedagogical research allows you to increase efficiency and quality. That's it mathematical methods and computing devices the impact of experimental results on pedagogy also helps. Typically, the arithmetic mean, substance, meridian, dispensation, the average of the set of the selected set quadratic deviation, mean value error, characters correction coefficients are calculated. Research results applied in practice. The most important thing in a completed study its results are practical. Independent Uzbekistan new scientific knowledge is being accumulated very rapidly. However, there are difficulties in implementing them in practice discarded. These challenges are all about improving the educational process active use of knowledge as it increases incompatibility between possibilities. However, taking appropriate action to implement them does not preclude going. The implementation process is aimed at improving the pedagogical experience is considered a focused activity. Therefore, the introduction high demands are placed on the necessary recommendations. The degree of scientific validity, the accuracy of their content educators with a measure of students' intended effort implies an accurate assessment. Implementation is a whole set of activities and informs the pedagogical community about the conclusions drawn to create new teaching and methodological manuals, methodical includes the development of guidance and methodological recommendations.

The method of analysis of school documents - pedagogical phenomena need to learn thorough school documentation in fact verification. Education in School Document Analysis, the law must be obeyed. In the analysis of school documents, the creative activity and independence of the student, his talent and generalization and implementation of best pedagogical practices will have full value only if specified. Also, the total number of students, its growth or a description of the reasons for the decrease, according to the subjects of the students to the level of mastery, to prevent falling out of class, to encourage and

attention to the types of sanctions, the material base of the school is given.

The method of studying children's creativity is the creativity of schoolchildren. The study and analysis of their various works is pedagogical and one of the effective methods of research. Gifted students can be differentiated with their mental abilities, noble moral images, aesthetic tastes, meticulousness by their own curiosity. The subject of pedagogy in-depth knowledge of the sources and factors of children's creativity and their right ways of further development and improvement aimed at showing.

The method of analysis and synthesis of statistical data is pedagogical, the required statistics of the study for a specific purpose and systematic study of science, culture in independent Uzbekistan, makes a significant contribution to the development of education. In the field of public education, including the constant growth of allocated funds, textbooks and manuals, visual aids, teacher training, school construction, economic contracts and the proceeds are determined statistically.

The questionnaire method is a way of asking students what they think obtain the necessary information about the knowledge of the team, to identify their views and opinions and to determine their professional orientation must be specially designed. In the questionnaire are purposeful questions and their answers the origin of pedagogical results is assumed. Questionnaire method of mass collection of written answers method. Questionnaire production is a complex scientific process. The reliability of the survey results is given in the content of the questionnaires depends on the form of the questions, the number of questionnaires completed. Typically, questionnaires are mathematical statistics using computerized application data is designed to allow you to work with techniques. On documents, such an analysis with sufficient accuracy is pedagogical connections and dependencies in the real activities of communities helps to determine.

Computational mathematics and cybernetics methods are current modern production, requirements and interests of science and technology life-tested techniques, computational mathematics and requires the use of cybernetics in school work and pedagogy does. Teaching the educational process of pedagogical-cybernetic form, to itself as a separate form of managing the learning process has a specific feature. So work with the pedagogical process there is a big difference between the automation of extraction processes. Film, sound engineering, photography, television in pedagogical research techniques such as They are students helps to activate the learning process. For children creates additional incentives. The tools shown each a subject to the age of the children and improves the pedagogical process.

Sociological research method - questionnaire questions are included. From this the goal is to determine students 'attitudes toward the profession, the friendships between students, itself to know the conditions of the higher education institution where he is studying, successes and failures, relationships between young people, religion (especially in mysticism) to identify students' interests level of spiritual qualities, desire to learn, with literature level of security, in improving scientific and professional skills type of classes, amount of stipends, financial support of parents, their education, place of work, place of residence of students, academic the factors influencing the formation of their worldview, their consciousness level process, spiritual qualities, faster to achieve perfection is to identify the negative qualities that need to be eliminated. Goals, objectives and implementation of the national program, the new socio-economic conditions of the stages, the demand for education, the level and

quality of training system in practice the priority of operational and sustainable development guarantees create a regulatory, logistical and information base that provides such issues form the basis of pedagogical research.

Today's education system, its goals and objectives, our republic a problem facing education that serves development should be consistent with the solution. It rules the world scientific and technological progress contributes to the socio-economic development of the country the people in managing and determining its future are intellectual shows the importance of information about the potential. A future generation that is fit for the intellectual potential of society upbringing is also an important issue in this regard and finding their solution is active in the "XXI century - the intellectual century" requires to achieve promising results such as educating the participant. It is known that the educational process is complex, multifaceted and multifaceted is a state-of-the-art, dynamic system. Hence the optimal management of its great scientific potential from researchers to find options and requires. Today, teaching methods, techniques and technologies are expanding in line with modern requirements. At the same time a complex that covers various aspects of the educational process the ability of any public education system employee to acquire knowledge will not be enough. In such cases, of course, education information about, database, information bank, information technology, knowledge bank creates a wide range of opportunities. In the future, not only the knowledge bank, but also the education system the knowledge, skills and competencies required are also in line with the requirements of global education should be responsive. Therefore, to the public education system a number of tasks have been transformed into the level of public policy. At the same time, the development of effective educational technologies and their application in practice is today's research our work should be the focus. In doing so, take into account the scientific and theoretical basis of research work. In creating educational technologies, taking into account the following must give:

- Socio-pedagogical bases of planned educational technology determine what it consists of;

- step-by-step as a process of educational technology determine if there is a hierarchical rigid sequence that can be implemented and determine what their functional structure consists of;

- the current technology meets today's requirements and the requirements of world education compliance review;

- if the educational technology in question as a whole system its structure is organizational-functional part systems (elements) study the possibility of expression on;

- the subject of study of the purpose of educational technology that is, to align with the goals of a particular educational process.

Educational technology is the teaching of a specific subject consists of scientifically based rules, methods, and techniques reflects the stages of achieving the goal of education and achieving purposeful management of the educational process is a process that allows. Especially pedagogical effects in conducting pedagogical research theoretical conclusion in the creation of scientific and methodological developments and both theoretical and practical thinking based on generalizations should be advanced in the researcher. The researcher is scientific in this regard To think, you need to pay attention to: - be able to clearly state the purpose of the study; - previously performed theoretical or experimental research must have developed a distinction on which to base; - must have developed a research methodology; - be able to identify the stages

of research need; - additional private in accordance with the developed methodology and plan research should also have the ability to conduct; - be able to scientifically and methodologically analyze the obtained results; - keep in mind that the expression of conclusions is descriptive.

Evidence in the history of science in the field of pedagogical research scientific about the logical sequence of scientific research in the example ideas are formed in the researcher. In this case, the scientists he or how they achieved these theoretical or experimental discoveries analysis data plays an important role. What problems what encouraged scientists to engage in research due to the fact that this problem has been solved at the stage of science development, how this research is with the development of technology and economics it is important to disclose the connection. This is their own in turn, in the formation of a dialectical way of thinking in the researcher is a necessary factor.

Pedagogical research with this in mind developing a system of knowledge in a particular area of conduct. The researcher deducts during their execution draw conclusions about scientific and methodological developments using the method let them get. As you know, in front of every researcher there is a total of humanity the task is to study, assimilate and develop resources. By imagining human perfection and the progress of society without them will not happen. The education system to accomplish this task constantly improving, the younger generation is a science should be deeply armed with the basics. After all, learning and improving research and hard work are human beliefs and shaping his worldview, leading him to spiritual and moral maturity leads. Pedagogical research in this area is practical

The role of importance is incomparable. Therefore, with the scientific and theoretical foundations of pedagogical research, their practical significance is also taken into account. Practical significance in assessing the scientific validity of scientific and theoretical developments in this area experimental work to see how much the benefit of the practice will be affected can be seen from the results. Based on the analysis of the results obtained, the trainees and providers of this knowledge, with the "National Training Program" and full implementation of established national referral principles the feasibility is determined. In this case, mainly experimental work the learner based on the characteristics of the implementation from modern information technologies in providing relevant information forms, methods, tools and content of use developed.

Pedagogical research belongs to the methodology of private teaching when, mainly, the criteria for quantitative comparison of results and their it is advisable to use geometric interpretation. This is mainly due to the quality of the educational technology created quality indicators in the control group are compared with the indicators and they are given quantitative recommendations, on the basis of which methodological recommendations and guidelines will be developed. The pedagogy defined in the next stage of research work in evaluating the results of experimental work on the basis of efficiency criteria in the application of developed educational technology to the goal set as a problem based on the results of the experimental work achievement is diagnosed. This process is also uniquely creative as a process, new pedagogical and information technologies and their efficiency to the development of the direction in which it is engaged in the future to be able to assess the impact of these developments. Then improve the relevant area of the research result and development is thus predicted.

In conclusion, the summary of research work through formed diagnostics

and predictions are extracted, generalized, and the achieved goal is determined and from created taking into account the theoretical and practical significance of the research guidelines and instructions for the practical application of developments are prepared. An assessment of the noted practical significance of the research work formalized and their public use when necessary brochures are prepared. In introducing the recorded sequence of research work, in turn, collect initial data from the researcher, from processing to creating training modules or models requires a high level of research work. Naturally, this is the learning technology developed with its vitality and pedagogical effectiveness are guaranteed.

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