

LOGICAL METHODS OF WORKING WITH COGNITIVE ACTIVITIES AND FORMS

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ABSTRACT:

The article provides information about the activity of students' cognition, the relevance of logical literacy, forms, methods and techniques of teaching.

Keywords: methods and forms of cognition, induction, deduction, analogy.

INTRODUCTION:

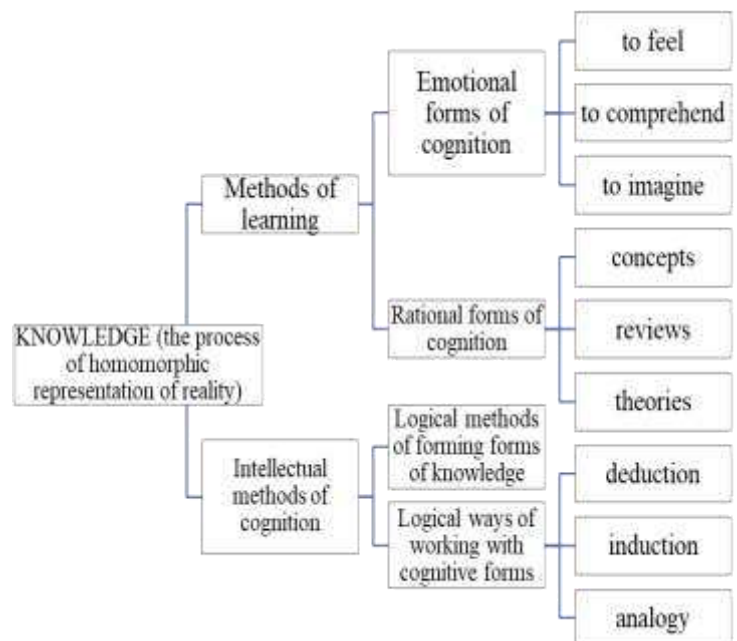
It is noted that in order for the young people who are the successors of our future to become full-fledged human beings, it is necessary to effectively use universal and national cultural values, equip them with new techniques and technologies. The complex tasks assigned to educational institutions, teachers, educators and parents are of state importance. 'can be ridden. Particular attention should be paid to the means of ensuring the physical, moral and mental development of students in the education system.

Therefore, acquisition of knowledge, vocational training requires independent thinking and mental activity from the pupil, which is considered both an object and a subject of Education. Any educational process is a complex pedagogical system that expresses the attitude of parents, teachers and students.

In the educational process, students begin to interact with each other. Children's cognitive activities are a unit of emotional perception, theoretical thinking, and practical activity. It occurs at every stage of education and is constantly evolving. Cognitive activity is strengthened in students' social interactions and in all types of learning activities. At the same

time, it is important for students to complete specific tasks in the learning process as they expand their learning activities.

Knowledge is a very broad concept and its methods, forms and techniques are described in the following cluster:



"Logic" is an Arabic word that corresponds to the word "logic". The term "logic" is derived from the Greek word "logos", which means "thought", "word", "mind", "law". Its ambiguity is reflected in the fact that it expresses different things. In particular, the word logic describes, firstly, the laws of the objective world (for example, in terms such as "objective logic", "logic of things"), and secondly, the forms of development and development of thought, including the relationship between ideas used to express a set

of rules (e.g., in the phrase "subjective logic"), and finally, thirdly, a science that studies the forms and laws of thinking. The object of study of the science of logic is thinking. "Tafakkur" is an Arabic word used as a synonym for "thinking" and "mental knowledge" in Uzbek. Thinking is the highest stage of knowing. To better understand its essence, it is necessary to determine its role in the process of cognition, its relationship with other forms of cognition.

Cognition consists of the representation of reality, including the phenomena of consciousness, in the human brain in the form of subjective, ideal images. Practice is the basis and ultimate goal of the learning process. In all cases, cognition is subordinated to the understanding of things that are more or less related to a person's life activities, which may satisfy a particular need. In the process of learning, people set goals for themselves. They determine the range of subjects to be studied, the direction of research, the forms and methods.

The deductive method of cognition allows us to draw a large number of conclusions from the relatively few basic rules and laws of this theory by making various logical and mathematical changes.

The value of deduction lies, first and foremost, in the fact that it always gives reliable, necessary conclusions in any form. Second, working with any type of data in a deductive way can express all the richness in the structure of our thinking. All other ways of thinking logically can be reduced to deduction. The ability to think in a deductive way is a key feature of logical thinking.

Third, discount is the main way to create evidence, argue, argue.

General scheme of deductive conclusion:

a) If A, then B; VA; therefore B.

b) If A, then B; wrong B; false A means.

Induction (in logic) is a method of discussion used to draw general conclusions from certain ideas and to study logic. The generality is learned by studying the specificity. Commonality is

inextricably linked to objects and events. One of the most important aspects of generality is inductive reasoning. The study of induction dates back to ancient science, Indian and Greek logic, and the Lao-tzu school. Problems of induction are found in the works of Aristotle and Abu Ali ibn Sina. With the advent of empirical science in the seventeenth and eighteenth centuries, scientists began to pay special attention to this issue. Scientists such as F. Bacon, G. Galileo, I. Newton, and J. Mill made significant contributions to the development of induction. Induction is important for science in the formation of knowledge, in the discovery of laws, in the process of developing concepts, and in advancing hypotheses.

Induction is divided into complete, incomplete, and scientific conclusions. Complete inductive reasoning is based on careful study and analysis of something. Complete Induction is always associated with incomplete Induction. Incomplete induction results in vague facts based on concrete facts, and as a result the mind is enriched. The highest form of induction is scientific induction. At the heart of scientific induction is the method of examining the causal relationship of things. Thus, based on the study of some species of plants, we conclude that water is the main source of life for them, because all plants need moisture.

The basis of any inductive inference is existence. This method plays an important role in the scientific knowledge of the world. Therefore, induction is always inextricably linked with deduction in knowing objective truth.

The concept of analogy. In addition to deductive and inductive reasoning, reasoning is also widely used in thinking in the form of analogy (Greek analogy - corresponding, similar). It is called an analogy to conclude that objects have the same characteristics and that they have the same characteristics.

Inference is based on the interdependence of the properties of the object. Properties do not

exist independently of each other, they are integral and shape the quality of the object. For example, the size of objects determines their shape, color, and other characteristics. The interdependence of features is the logical basis for drawing conclusions by analogy.

In short, creating a learning situation is a student's cognition they are trying to substantiate in every way that they will create ample opportunities for the development of their activities. If a student wants to know, he needs to know they develop healthy inclinations and interests, and they succeed in the process of learning.

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