

## THE QUESTION OF THE IMPLEMENTATION IN LIFE OF INDUCTIVE AND DEDUCTIVE INFERENCE IN ADULTS

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### ABSTRACT

*This article covers the question of the implementation in life of inductive and deductive inference in adults. In the statement of his pedagogical knowledge, the question of the effective use of the rules of logic, the use of the rules of syllogism in the process of repeating, practicing and motivating what has been studied is described.*

**Key words:** *deductive analysis, teaching methodology of pedagogical science, logic, syllogism, logical thinking, critical thinking, pedagogical thinking, logical observation.*

### INTRODUCTION

The law of the Republic of Uzbekistan “on education” and the “National Program for training” have acquired a high general culture, professional skills, creative and social activity, the skill of observing logic and finding rational solutions to problems in social life. Nowadays, in World Science, the term “deduction” is used in a broad sense, and it is understood to draw conclusions from a certain judgment on the basis of the laws of logic. If the underlying Hukm laws of quagmire and deduction are followed, the conclusion from it will also be valid. Deduction is the main tool of provenance. Therefore, theories in science are created as a result of the deductive method. Typically, the deductive method is used after the accumulation of factual materials in a given field, for in-depth study, systematization, and other purposes. Deduction is also valid in psychology and cognitive theory. Deduction is manifested in psi-psychology as a method of scientific cognition in cognitive theory, when one studies the process of individual thinking of an individual.

The deductive method occurs in various forms, notably the axiomatic method, as well as the hypothetical-deductive method. A complex of ideas that underlie the creation of a theory by deductive means from existing factual materials (Axiom and b.) are selected and other knowledge is generated from them based on logic notation. In the current period, when the volume of information in society is extremely expanding, the acceleration of the flow of information requires that students can

analyze and synthesize information, consider it without direct acceptance, on the basis of a critical and creative approach, and distinguish between what is important and useful to them based on deductive analysis, and in this it is Thinking is a process of personality cognitive activity, characterized by the direct and generalized reflection of reality. Thinking embodies interdisciplinary research, complex Sciences.

To draw conclusions when performing deductive analysis, it will be necessary to develop students' logical thinking, following the rules of logic. K.D.Ushinsky said: "comparison is the basis of any understanding and any thinking. It is complicated in another way if we do not learn everything in the universe by comparing it and seeing it. If we had come across something new that we could not compare with something and find out the difference, then we would not have been able to generate any ideas about that thing and say anything about it."

Logical thinking-as a high stage in the reflection of reality, expresses to a person rational thinking in complex and problematic situations, as well as effective decision-making, sequence consistency, connection of ideas on the basis, and embodies an important aspect of the creative activity of the individual. Formation of students' logical thinking-as a holistic system, covers the purpose of education, the activities of the teacher and the student, the result of education, the content of Education, form, method and Means. To develop logical thinking abilities and deductive analysis skills in students in pedagogical lessons, the result of the activity of the teacher and the student depends on the purpose of the didactic process, the content of the educational material, the correct and reasonably established and selected form, methods and means of teaching, and for its successful implementation, active influencing factors are required. It is known that the mental potential of a person consists of a complex system of processes, which have an extremely complex structure. Psychic activity in vivid observation, abstract (imaginary) thinking and from it to learning is multicomponent in order to correctly interpret things and phenomena, processes and changes in terms of objective reality. Of these, two are induction and deduction. Induction is the total output of a produced summary by observing a certain number of isolated facts, events, and processes, relying on those observations. By this method, a large number of objects or processes are first thoroughly observed, studied, then a single, general conclusion is drawn from these observations. In induction, logic does not have a main place, experience has a primary role. From the facts, the rule is followed by a single general conclusion from many examples in the singular. A general conclusion is developed from private cases, opinions.

## RESEARCH METHODOLOGY.

Scientific pedagogical principles such as systematicity, theoretical-deductive inference, analysis and synthesis, historicism and logic, comparative-comparativistic analysis were used during the research. Induction (lot. Induction-rectification, regularization) (in logic) is a method of discussion applied to the derivation of general conclusions from certain points and to logical research. By studying privacy, commonality is learned. Commonality is inextricably linked with objects and phenomena. One of the most important aspects of generality is inductive inference. The study of induction began in science from time immemorial, in Indian, Greek logic, in the Lao-szi school. Induction issues are found in the works of Aristotle, Abu Ali ibn Sino.

With the advent of empirical Natural Science in the XVII-XVIII centuries, scientists paid special attention to this issue. F. for the development of induction. Bacon, G. Galileo, I. Newton, J. Scholars such as Mill made significant contributions. Induction is important for Science in the organization of knowledge, in the opening of laws, in the process of fielding concepts, in the advancement of the hypothesis. Induction is divided into full, incomplete, and scientific inference. Complete inductive inference is based on a careful study and analysis of something. Total induction is always associated with incomplete induction. In incomplete induction, vague facts are induced on the basis of specific facts-as a result, consciousness is enriched. The supreme form of induction is scientific induction. On the basis of scientific induction lies the method of checking the causal connection of things. For example, based on the study of certain manifestations of metals, we conclude that metals have a crystal structure, since metals conduct electric current well, and all metals have a metal crystal lattice (except Mercury). The basis for any inductive inference is being, something. This method plays an important role in the scientific knowledge of the world. Therefore, in the knowledge of objective truth, induction always has a strong association with deduction.

Deduction-one preexisting common truth is said to be applied to ground-breaking, singular states based on the rules of general principle's own orderly reasoning and logic. In deduction, a general hypothesis is examined through existing solitary States in life. This general principle is pre-existing and the cases are only studied to verify, apply this principle. Here the primary is logic; the experiment is secondary. Deduction (lot. deductio-inference) - inference according to the rules of logic. Originally in formal logic, discussion from generality to privity, towards some, was called deduction. For example, "from the two judgments," all metals are electrically conductive and "copper – metal", a deductively new judgment is made,

"copper is electrically conductive". The opposite of induction. In the literature on logic, the term "deduction" is first used by the Roman logician-philosopher Boethius. However, this doctrine in the form of syllogism was first analyzed in Aristotle's "first Analytica". Later, the concept of deduction was developed by R.Descartes, G.Philosopher-mathematicians such as Leibniz developed. In medieval Arabic philosophy, deduction was given special attention by Rozi, Ghazzali, Ibn Rushdi. Those who saw it as a means of giving him new knowledge. Phorobius, Ibn Sina, innovated Aristotle's deductive logic by developing conditional, subversive-like forms of logic rather than just a form of syllogism.

### **ANALYSIS OF LITERATURE ON THE SUBJECT.**

They created new ways to draw conclusions. In modern science, the term "deduction" is used in a broad sense, and it is understood to draw conclusions from a particular judgment on the basis of the laws of logic. If the underlying Hukm is valid and the deduction laws are followed, the conclusion from it will also be valid. Deduction is the main tool of proof. Therefore, theories in science are created as a result of the deductive method. Typically, the deductive method is used after the accumulation of factual materials in a given field, for in-depth study, systematization, and other purposes. Deduction is also valid in psychology and cognitive theory. Deduction is manifested in psychology as a method of scientific cognition in cognitive theory, when one studies the process of individual thinking of an individual. The deductive method occurs in various forms, notably the axiomatic method, as well as the hypothetical — deductive method. A complex of ideas that underlie the creation of a theory by deductive means from existing factual materials (Axiom and b.) are selected and other knowledge is generated from them based on the laws of logic.

### **ANALYSIS AND RESULTS.**

Deductive inference. Deductive inference is done in two ways: 1) Direct deductive inference; 2) indirect deductive inference. Direct deductive inference. From one basis it is argued that the generation of a new thought (knowledge) through logical analysis is directly deductive inference. In this, some observations are processed. In the observation that underlies a new thought (knowledge), the basis of the conclusion is the resulting new thought - the conclusion. In making a direct conclusion, logic is realized using methods. Such logical methods include: (a) inference by substitution (b) inference by rotation (v) placing opposite to the predicate. Substitution is such a logical method in which the subject of the underlying

judgment (s) is replaced by the predicate of the conclusion (R), and its predicate (R) is replaced by the subject of The Conclusion (s) ra. From this, the content of the idea remains unchanged. For example, some simple substances (S) are gas (R). So some gases (s) are ordinary substances. (R). The substitution method ensures that the conclusion drawn is clear. As a result of the substitution, a general confirmation (a) can be formed from the observation of the juzee confirmation (J). For example, all alkaline metals release hydrogen when water is exposed. Hence, hydrogen is released when caesium interacts with water. The given conclusion can be drawn into the following scheme: all S — R (a). So some S-R (J). It is also possible to derive a common negation sentence (YE) from a common negation sentence (YE) as a result of substitution, and a common affirmation sentence (A) from a common affirmation sentence (a).

### CONCLUSIONS AND SUGGESTIONS.

In conclusion, socio-economic changes in society require the transformation of the personality of students into specialists who are comprehensively intellectual, educated, able to make optimal decisions in new situations and aimed at spiritual development. The organization of such an education can be ensured only when an individual-oriented and deductive analysis skill-developing study is carried out on the basis of innovative technologies. The introduction of deduction and induction into pedagogy and its teaching process, why these concepts are included, can be explained as follows: - the need to improve the quality of teaching pedagogy; - the use of deduction in teaching pedagogy is not an auxiliary tool, but an important concept in the formation of the kretiv ability of educators, especially in the study of young people; - the absorption of logic as a result of ensuring continuity, training ensures an increase in efficiency.

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