

## IMPROVING THE METHODOLOGY FOR DEVELOPING STUDENTS' LOGICAL THINKING SKILLS THROUGH HISTORY LESSONS

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**Abstract.** *This scientific article comprehensively analyzes the theoretical and methodological foundations of the formation of logical thinking skills in students through history lessons. The article highlights the role of history in the development of cognitive processes such as understanding cause-and-effect relationships, forming an analytical approach, comparing, generalizing and evaluating. The psychological and pedagogical essence of logical thinking, the stages of development of thinking processes, and factors that increase the student's mental activity when working with historical materials are scientifically highlighted. The effectiveness of methods such as analyzing historical sources, creating problem situations, stimulating thinking through a system of questions, modeling historical events, analyzing based on a cause-and-effect chain, and teaching the principles of variant and historicity in the formation of students' logical thinking is shown.*

**Keywords:** *Logical thinking, history education, pedagogical methodology, historical sources, coherent thinking, analytical approach, principles of historicity.*

### Introduction

In the process of developing students' logical thinking in history lessons, the role of the analytical comparative method is of particular importance, since historical processes manifest themselves differently in different periods, regions, and social conditions, and this diversity encourages the student to compare them in order to understand the essence of events. In the process of comparison, the student identifies similarities and differences between two or more historical events, which helps to draw analytical conclusions about their common and specific aspects. Comparison is one of the main operations of logical thinking and strengthens the student's ability to understand the interrelationships between events in his thinking.

For example, comparing the political systems of different countries in the same period, comparing the results of economic reforms carried out in different countries, or comparing the views and activities of two historical figures deepens students' historical thinking and develops the ability to draw logical conclusions. Another approach to strengthening logical thinking in history lessons is to develop the ability to interpret, that is, to interpret historical data, in which students, while not only perceiving historical events as a sequence of facts, form their own opinion about their essence, content, and social significance.

In the process of interpretation, the student approaches events in more depth, analyzes them, synthesizes information from various sources, and draws certain conclusions from the available evidence. This activity is an important component of logical thinking, since processes that require the analysis of historical data significantly increase the level of thinking of students.

Through historical interpretation, students begin to understand the internal mechanisms of complex social processes, reveal the causal system behind events, analyze the social consequences of historical decisions, and learn to justify their point of view. In addition, another important methodological tool for developing logical thinking in history lessons is the use of graphic images such as maps, diagrams, and schemes, since they all visually reflect the structure,

interrelationships, and sequence of events, thereby creating the basis for the formation of coherent logical structures in the student's thinking. Simplifying complex historical processes through diagrams and schemes, logically analyzing them, highlighting the main factors, and explaining the structure of processes increases the level of logical thinking of students.

Historical maps, along with the development of spatial imagination, help to understand the connection of historical events with geographical factors, which directly affects the logical analysis skills of students. Another effective way to develop logical thinking in history lessons is to use the method of working in small groups, because group communication, mutual exchange of ideas, active participation in debates teach students to discuss their own opinions, listen to the opinions of others and evaluate them on a logical basis, identify differences between different points of view and conduct analytical reasoning on them.

In the process of working in a group, students draw conclusions together on a historical issue, in which their logical thinking process is naturally activated, because each student brings arguments to defend his opinion, analyzes and argues the arguments of others. Debates are one of the most active forms of logical thinking, forcing each student to think and encourage them to draw logically based conclusions. Also, the use of role-playing games and modeling methods based on historical scenarios in history lessons also serves to develop logical thinking, because in such activities the student puts himself in a historical setting, thinks, analyzes the situation, experiences the decision-making process, and imagines the development of events on a logical basis. Role-playing games bring historical processes to life and activates students' thinking, strengthening skills such as cause-and-effect analysis, understanding the sequence of events, and drawing logical conclusions.

Scenario-based modeling allows students to understand the internal mechanisms of historical processes more deeply, and this process naturally strengthens logical thinking. In the process of forming students' logical thinking skills in history lessons, it is important to gradually increase the level of complexity of questions and tasks, because the student first starts with understanding simple facts and concepts, and then learns to perform complex thinking operations such as analysis, comparison, generalization, and interpretation. A system of increasingly complex questions develops the student's thinking process, encourages him to think, justify his opinion, and search for evidence.

The step-by-step methodology is especially effective in history lessons, because in mastering historical processes, students get acquainted with many historical facts, events, and concepts, all of which must be mastered in a logical sequence. At the same time, a complex system of questions strengthens independent thinking in students, allows them to connect historical information with each other, understand the interaction between individuals, events, and processes, and draw analytical conclusions about them.

Another important factor in developing logical thinking in the process of teaching history is to encourage students' independent research activities, in which students find additional information on historical topics, analyze sources, form their own opinions, and logically justify them. Independent research activities further activate the student's thinking process, form an analytical approach to problem situations, develop intellectual skills such as independent assessment of historical evidence, comparison, generalization, and justification of information from different sources.



Independent research encourages the student not only to accept ready-made information, but also to draw new conclusions based on the knowledge gained, and to approach historical issues critically. This process refers to the highest stages of logical thinking, since in it the student performs operations such as in-depth analysis, synthesis, and generalization. The use of the problem-based learning method in history lessons also intensively develops the logical thinking of students, since a problem situation forces the student to think independently, reason logically to find a solution, analyze available evidence, put forward various assumptions and try to justify them. In the process of problem-based learning, the student studies the complex aspects of historical events, identifies cause-and-effect relationships, assesses the sufficiency or insufficiency of existing information, understands the need to search for additional evidence, and considers several ways to reach a solution.

This activity has an effective effect on the development of logical thinking, since each problem situation requires active thinking from the student. Tasks based on problem situations enliven the content of history lessons, encourage students to imagine a realistic picture of historical processes, strengthen their creative, analytical thinking, and logical research skills. In the process of working on historical texts, such skills as analyzing the text, distinguishing main ideas, determining the author's position, and understanding the historical content of the text contribute significantly to the development of logical thinking. Text analysis teaches the student to think, evaluate the evidence in the text, and distinguish between primary and secondary information. In the process of working with the text, the student organizes the flow of information, divides it into logical structures, identifies the connections between the ideas and evidence expressed in the text. This process is a component of logical thinking and directly affects the intellectual development of students. Working on historical texts, especially the analysis of sources such as documents, letters, inscriptions, archival materials from different periods, develops historical thinking and logical thinking in students together. An approach based on the analysis of historical sources is of particular importance in the process of developing logical thinking in history lessons, since working with historical sources directly turns the student into a participant in the scientific research process.

Working with sources requires students to carefully read the evidence in the text, reflect, critically evaluate it, determine the reliability of information, and try to restore the original picture of historical events. Source analysis includes all the components of logical thinking: analysis, synthesis, comparison, conclusion, generalization, justification and argumentation. The reader tries to understand the historical situation reflected in the source text, understands the author's position, identifies and responds to the ideas directly or indirectly given in the text. This process clarifies the reader's thinking, forms a culture of working with evidence, and helps to form logical structures in his thinking. In the process of working with sources, historical sources often complement each other or, in some cases, contradict each other, so students are taught to draw clear and reliable conclusions by comparing different sources. Analyzing the differences in the description of events in different sources develops students' critical thinking skills, directs them to a deeper understanding of historical processes. Comparing sources and identifying similarities or differences between them develops higher forms of logical thinking in students, prepares them to make independent decisions, and understand the complexity of historical reality. The use of historical sources enlivens the lesson process, increases students' interest in historical events, and forms a culture of scientific research in them.

Another effective tool for developing logical thinking in history lessons is cause-and-effect analysis, since historical processes are based on a system of interrelated factors, and understanding them requires a deep analytical approach from the student. Cause-and-effect analysis encourages the student to identify the factors that influenced the occurrence of an event, understand their interdependence, identify the main reasons that caused the event, and evaluate the results of the event. The student begins to see historical processes not only as sequential facts, but as a complex system. This process strengthens logical thinking, since the analysis of cause-and-effect relationships requires the student to consistently develop thinking, compare different factors, and assess their strength.

Through cause-and-effect analysis, the reader understands the internal logic of historical processes, understanding them not as a collection of random events, but as a complex of interconnected social, political, economic, and cultural factors. In addition, creating conceptual maps and logical graphs in history lessons activates students' thinking, as this method allows the student to systematize, organize and express the learned information through logical connections.

Conceptual maps help students visually reflect the connections between events, and a schematic depiction of complex historical processes further strengthens logical thinking. This method teaches students to systematize their knowledge, express it in an orderly manner, and develops the ability to consistently see the connections between facts. Maps of historical methods are especially effective in studying major historical processes, helping students to understand the content more deeply and process it logically. When analyzing the process of developing logical thinking in history lessons in more depth, it becomes even clearer how important it is to combine historical content with the natural stages of development of students' thinking, because history is not only a set of facts, but also a scientific system aimed at studying complex social phenomena of humanity, cause-and-effect relationships, changes in time and space, and the internal mechanisms of social processes.

It is these aspects that lead students to independent, consistent, chain, reflexive and analytical thinking. Therefore, the skill of a history teacher is not limited to restoring or memorizing the image of knowledge in the minds of students, but is aimed at forming in their minds thinking mechanisms that allow them to analyze reasons, compare theses and antitheses, compare one phenomenon with another, understand the variant nature of historical processes and their impact on modern life, because logical thinking itself requires the complex development of consciousness, reconsideration of space, reconsideration of time, and a comprehensive consideration of mental activity. requires a number of skills, such as generalizing the historical context, drawing conclusions and substantiating them with evidence, therefore, each episode, each text, each question, each task of history lessons, especially in the current information age, against the background of a continuous flow of historical information, various sources, different interpretations of historical events, and sometimes simplified interpretations of social networks, should be considered as a pedagogical tool that affects the student's thinking mechanisms. It is even more important to teach students to think logically, because logical thinking allows the student to separate facts from opinions, verify evidence, reject unfounded conclusions, determine cause-and-effect relationships in the development of events, compare different historical narratives, and most importantly, form an independent intellectual position. In this regard, the methodology developed for history lessons

Among the approaches, such methods as creating a problem situation, explaining historical facts, comparing sources, working on a chain of logical questions, drawing theoretical



generalizations from historical experience, building cause-and-effect models, predicting variants of historical events, analyzing their modern consequences occupy a special place, since such methods encourage the student not only to think, remember, analyze, but also to doubt, search and draw conclusions, and this process is fully consistent with the natural development mechanism of logical thinking. In the process of developing logical thinking, the historical context itself is of particular importance, because historical events consist of multi-stage, multi-factor, complex systemic processes, and the more the student understands the interaction of these factors, the deeper his thinking, the deeper his thinking.

For example, in the process of studying the fall of an empire or the rise of a people, economic crises, changes in political systems, ideological struggles or conflicts between social classes, the student is forced to look for reasons, compare different options, and compare the events of one period with another, which is fully consistent with the mechanism of action of logical thinking and is also a suitable process for a history lesson. Another effective method of developing logical thinking through history lessons is the methodology of working with historical sources, since analyzing sources requires the student to perform complex cognitive operations, such as understanding the text, separating the main idea and secondary information in it, analyzing the author's position, sorting the evidence in the text, drawing conclusions based on them, and comparing it with other sources. This process in itself strengthens and deepens the skills of analysis, synthesis, comparison, classification, evaluation, and generalization, which are the internal structure of logical thinking.

The methodology of comparing historical sources is particularly effective because the joint analysis of sources from two different periods or different authors' views on the same event teaches the student to compare facts, evaluate opposing views, understand the principle of historicity, and verify the reliability of evidence, which is an important component of logical thinking.

#### Conclusion

In conclusion, it can be said that the use of the logical modeling method based on historical events also enriches students' thinking, because in the process of creating a model, the student selects facts, identifies the connections between them, builds a cause-and-effect chain, imagines the direction of development of the event, considers its possible alternative options, which synergistically develops analytical, logical, prognostic thinking. The modeling process forces the student to approach the event not only as a historian, but also as a researcher, analyst, evaluator, and this, in turn, leads to independent thinking.

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