

TEACHING HUMANITARIAN SUBJECTS BASED ON A COGNITIVE APPROACH

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Abstract: This article analyzes the theoretical and practical foundations of teaching humanities from the perspective of the cognitive approach. The cognitive approach is a teaching method aimed at activating the cognitive processes of students, developing their abilities to think, understand, and solve problems. The article highlights such aspects as organizing lessons based on this approach, using interactive methods that ensure a deep understanding of knowledge, and forming critical and creative thinking. Also, the didactic effectiveness of the cognitive approach in teaching the humanities is substantiated with practical examples.

Input

In the modern education system, interdisciplinary approaches, innovative technologies, and personality-oriented methods remain one of the priority areas for improving the quality of education. In particular, the humanities - such areas as history, literature, philosophy, art - play an important role in the formation of students' thinking, moral and aesthetic views, and cultural consciousness. In this process, the organization of lessons based on a cognitive approach is recognized as an important factor in the development of students' skills of independent thinking, analysis, and deep assimilation of knowledge.

Cognitive approach: Theoretical foundations

The cognitive approach is a psychological trend that studies the processes of how the human mind perceives, stores, and applies knowledge in practice. This approach was developed in the second half of the 20th century by such scientists as Bruner, Piaget, Vygotsky, Ausubel, and Anderson.

The main focus is on the student's cognitive activity, i.e., how they connect new knowledge with existing knowledge, solve problems, and apply it in new situations. In cognitive psychology, the individual is interpreted as an active and reflective learner.

Principles of the cognitive approach for the humanities

The cognitive approach is based on the field of psychology that studies the processes of receiving, storing, and processing knowledge. It includes the following basic principles in the education of the humanities:

1. Knowledge Structuring

It is important to create a logical structure of the educational material. Knowledge is presented in a logical order, with interdisciplinary connections. Knowledge is compiled in the form of conceptual maps, diagrams, and tables. This method is based on Bruner's concept of a "spiral curriculum."

2. Metacognitive strategies

Students are taught to understand and manage their cognitive processes. For example, skills such as asking questions, planning knowledge, intermediate reflection, and error analysis are formed. This increases the potential for an independent approach to life problems.

3. Development of critical thinking

The essence of the humanities is based on critical analysis, alternative thinking, argumentation, and drawing well-founded conclusions. Through a cognitive approach, these processes are developed through systematic exercises.

4. Contextual education

Knowledge is studied not in isolation, but in harmony with the historical, cultural, and social conditions in which it arose. This approach also corresponds to the principles of constructivism.

Application of the cognitive approach in the humanities

a) Cognitive approach in literature

The cognitive approach to the study of literary texts suggests analyzing them in connection with human thinking, perception processes, and the structural composition of knowledge. In this approach, the text is considered not only as a collection of artistic images, but also as a product of the author's thinking, the socio-cognitive conditions of society, and the result of the reader's interpretation. In cognitive literary studies, the following methodological aspects and practical methods are distinguished:

1. Text analysis based on context: personality, period, and social perceptions

For a deep understanding of a work of art, it is necessary to study it in connection with the personal cognitive experience of the creator, the form of thinking of the historical period, and the social context.

Author's consciousness and imagination: The images and ideas in the work are an expression of the author's worldview, beliefs, and psychological experiences. For example, in Qodiriy's work, the ideas of freedom reflect the intellectual thinking of the time in which the author lived.

Historical-cognitive environment: The style of thinking that prevailed in each period is also absorbed into the literary text. For example, symbols and images in Eastern literature are connected with mythological and philosophical thinking.

Social consciousness and codes: The issues raised in the text represent the general consciousness of groups, genders, or strata in society.

2. Activation of students' thinking

Within the framework of the cognitive approach, tasks that develop critical and creative thinking are used:

Creating an alternative scenario for the plot: Imagining the development of the events of the work in a different way directs students to counterfactual thinking.

Analysis of characters' consciousness: Evaluating characters' decisions and actions based on their inner feelings and errors in understanding.

Visual thinking tools: Knowledge is systematized by creating semantic maps based on topics, images, and symbols.

3. Interactive approach: increasing activity in class

Cognitive literary studies requires live work with the text:

Role-playing and staging: By expressing the work in theatrical form, students deeply understand the world of the characters.

Cognitive reasoning (essays): Students write an analysis based on personal experience and scientifically based opinions based on the text.

Conversations using the Socratic method: Students' logical and philosophical reasoning is activated through open-ended questions

4. Literary analysis based on theoretical approaches

The following scientific foundations play an important role in cognitive analysis:

Schema Theory: The reader understands the text based on prior knowledge, therefore archetypes and cultural patterns are important in analysis.

Conceptual Metaphor Theory: Abstract concepts are expressed through metaphors, and they reveal the structure of human thought.

Theory of Mind: Students develop the ability to understand others' ways of thinking by analyzing characters' intentions.

b) Cognitive approach to teaching history

The cognitive approach to teaching history is a pedagogical methodology aimed at increasing the intellectual activity of students in the process of acquiring knowledge, developing analytical skills, and a deep understanding of historical events. This approach is based mainly on the synthesis of cognitive psychology, constructivism, and advanced educational technologies.

1. Structural study: Analysis of cause-and-effect relationships

In the cognitive approach, historical knowledge is systematically studied from the point of view of cause (determinism) and consequence (consequence). This process is related to the theory of cognitive systems (Cognitive Systems Theory) and schema theory (Schema Theory), where students combine new information with existing knowledge to create logical structures.

Scientific Basis:

According to J. Piaget's theory of intellectual development, students must arrange phenomena in logical schemes to understand them.

With the help of conceptual maps, the interrelationships of historical events are visually represented (for example, a map of the economic and political causes of the First World War).

Practice example:

In the study of the French Revolution, the connection between economic crisis, social stratification, and Enlightenment ideas is analyzed.

2. Development of historical thinking: documents and chronological analysis

The development of critical thinking (Critical Thinking) and metacognition skills (Metacognition) is a priority in the cognitive approach. This process allows students to independently read documents, evaluate sources, and conduct chronological analysis.

Scientific Basis:

According to L. Vygotsky's socio-cognitive theory (Sociocultural Theory), working with historical sources expands the "Zone of Proximal Development" of students.

High levels of Bloom's taxonomy (analysis, evaluation, creation) are used in historical texts.

Practice example:

Students explain the political processes that led to Uzbekistan's independence based on original documents (for example, the 1991 Declaration of Independence).

3. Role-playing and Debate: Empathy and Multi-Perspective

Viewing and discussing history from different perspectives contributes to the development of empathic understanding and pluralistic thinking. This method is based on the principles of social constructivism.

Scientific Basis:

According to D. Kolb's model of experiential learning (Experiential Learning), through role-playing games, students "experience" the views of historical figures.

With the help of discourse analysis methods, the speech strategies of different groups are compared (for example, the difference in views in the history of Soviet and independent Uzbekistan).

Practice example:

Conducting a discussion on the topic "Frontlines in the Second World War," dividing the roles of military commanders, civilians, and diplomats.

The cognitive approach transforms the process of teaching history from passive memorization to active analysis. This methodology relies theoretically on cognitive psychology and constructivism, and practically on interactive methods (modeling, projects, documentaries). As a result, students will not only know history, but also be able to explain its impact on the modern world.

c)Cognitive approach in philosophy and art education.

Philosophy and art provide an opportunity to enhance the ability to understand and analyze more deeply through the application of cognitive methods in sciences. The main methods of the cognitive approach in philosophy and art education - Socratic communication, art analysis, and methods of aesthetic reasoning - are studied from a scientific point of view.

1. Socratic communication: The dialectical method of assimilating philosophical concepts

The Socratic method is a dialogue between the teacher and the student in the form of a question and answer, in which students are encouraged to independently discover knowledge through logical thinking.

Theoretical foundations:

According to Piaget's theory of cognitive development, a child is not only a passive recipient, but also an active builder of knowledge. The Socratic method of communication serves the development of a person's constructive thinking (Piaget, 1950).

Vygotsky's concept of the "zone of proximal development" indicates that in the Socratic method, questions posed by the teacher raise the status of students to a higher level (Vygotsky, 1978).

Methodological recommendations:

Balanced use of open and closed questions (For example: "Why is justice important?," "What emotions are reflected in this picture?").

Enhance students' thinking abilities by involving them in group discussions.

2. Art analysis: Development of cognitive-cognitive processes

Analysis of works of art is an important tool not only for understanding artistic values, but also for critical thinking, systematic analysis, and improving visual literacy.

Theoretical foundations:

Arnheim's theory of "visual thinking" (1969) emphasizes that the analysis of works of art forces the human mind to function as a complex system.

According to Gardner's theory of "multilateral intelligence," through art analysis, a person's visual-spatial, intrapersonal, and interpersonal abilities develop (Gardner, 1983).

Methodological recommendations:

Application of the "View - Analyze - Evaluate" methodology in the analysis of works of fine art.

Comparison of content, composition, and creative style in musical and theatrical works.

3. Aesthetic reasoning: Formation and justification of personal views

Aesthetic concepts play an important role in shaping a person's worldview. In the cognitive approach, aesthetic reasoning is not only the ability to perceive beauty, but also the ability to logically justify it.

Theoretical foundations:

Baumgarten's aesthetic philosophy (1750) shows that aesthetic perception includes not only emotions, but also mental processes.

Dewey's theory of "experience as art" (1934) asserts that aesthetic concepts are reinforced through active practice.

Methodological recommendations:

Encourage students to justify their opinions with questions like "Why did you like this?"

Understanding the diversity of aesthetic views through comparing works of art from different cultures.

The cognitive approach in philosophy and art education is a system aimed not only at providing knowledge, but also at developing students' abilities for critical thinking, finding creative solutions, and deep analysis. With the help of such methods as Socratic communication, art analysis, and aesthetic reasoning, the educational process can be carried out in a more effective and personality-oriented way.

d)Integration of digital technologies and the cognitive approach:

Today, digital technologies occupy an important place in the education system, bringing significant changes, especially in the development of human thinking and increasing the effectiveness of learning. The possibility of an individual approach to students is created through an educational environment formed on the basis of artificial intelligence (AI), virtual and augmented reality (VR/AR), as well as interactive platforms. These technologies serve for a deeper assimilation of knowledge by visual and experimental methods.

1. Cognitive Theory and Digital Environment

According to cognitive psychology, a person receives information in various forms - visual, auditory, and motor (Paivio, 1986). Two-channel coding theory (Dual Coding Theory) shows that knowledge is stored for a long time when text and image are used together (Mayer, 2005). Today's digital tools - the animation of historical scenes or the interpretation of literary texts in an animated form using VR - are a real expression of this theory.

2. Artificial Intelligence and Adapted Education

AI-based systems (such as ChatGPT, Duolingo, Coursera) offer personalized curricula, taking into account the individual capabilities, learning pace, and needs of each student. Adaptive learning systems (VanLehn, 2011) are capable of transforming learning materials in real time, which is a practical solution to Bloom's famous "2 Sigma Problems" (1984) - that is, significantly increasing the learning effectiveness of each student through an individual approach.

3. VR/AR Experimental Learning

VR and AR technologies allow for the implementation of the experimental learning model developed by Kolb (1984). Examples:

In history lessons - a trip through ancient cities via VR.

In Biology - 3D study of human internal organs.

Studies show that knowledge acquired in a virtual environment is remembered 30 percent more often than traditional methods (Pottle, 2019)

4. Visualization and Learning Activity

Multimedia tools (e.g., PhET simulations, Kahoot!) Based on the theory of cognitive load (Sweller, 1988), it helps to simplify complex topics. Gamification (education through game elements) - makes learning more interesting by encouraging students through points, rewards, and leadership rankings

Digital technologies, combined with a cognitive approach, bring education to an innovative and effective form. In the near future, AI, VR, and neurotechnologies will be further improved, marking a new stage in the personalization of education.

Conclusion

The cognitive approach, as one of the modern pedagogical paradigms in the teaching of humanities, plays an important role in increasing the effectiveness of the educational process. This approach is based on a deeper study of the processes of thinking of the individual, the mechanisms of receiving, processing, and applying information in practice. As a result, students will not only acquire theoretical knowledge, but also acquire modern skills such as the ability to apply it in life situations, critical thinking, a creative approach to problems, and the development of alternative solutions.

Also, the educational process, organized on the basis of a cognitive approach, encourages the individual to be active, participate in social life, freely express their point of view, and be active in intercultural communication. This serves to fully realize the possibilities of the humanities in the comprehensive development of man. Therefore, the cognitive approach enriches not only the content of education, but also its methodological foundations, transforming the humanities into a universal platform for enhancing the intellectual potential of the individual.

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