



THE INTERRELATION BETWEEN THE COGNITIVE APPROACH AND FRAME TECHNOLOGY IN FINE ARTS EDUCATION

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Abstract

This thesis examines the interrelation between the cognitive approach and frame technology in fine arts education. In modern pedagogy, the development of learners' cognitive activity, creative thinking, visual perception and independent analysis has become one of the most important tasks of the educational process. Fine arts lessons have a special role in this process because they combine perception, imagination, observation, emotional response and practical creative activity. However, effective learning in fine arts requires not only artistic skills but also the ability to understand, classify, compare and interpret visual information. In this regard, frame technology serves as an effective pedagogical tool for organizing knowledge in a structured and meaningful way.

Keywords: fine arts education, cognitive approach, frame technology, visual thinking, cognitive activity, artistic perception, creative thinking, pedagogical technology.

In contemporary education, the main goal of teaching is not limited to transmitting ready-made knowledge. Modern education aims to develop a learner who can think independently, analyze information, solve problems creatively and apply acquired knowledge in different situations. This requirement is especially important in fine arts education, where students learn not only to draw or paint, but also to observe the world aesthetically, understand artistic images and express their own creative ideas. Fine arts as a school subject has a powerful influence on the intellectual, emotional and aesthetic development of students. Through drawing, painting, composition, sculpture and analysis of artworks, learners develop visual perception, imagination, memory, attention, comparison, generalization and interpretation. These processes are directly related to cognitive activity. Therefore, the cognitive approach in fine arts education allows the teacher to organize lessons in such a way that students do not remain passive observers, but become active participants in the process of artistic cognition.

At the same time, one of the effective methods for developing cognitive activity is frame technology. A frame can be understood as a structured model of knowledge that helps organize information around a certain concept, image, event or phenomenon. In fine arts education, frame technology may be used to



analyze an artwork, describe an artistic genre, compare visual elements, understand the historical background of a painting or plan a creative task. As a result, students can clearly see the connection between separate elements of knowledge and create a complete understanding of the studied material. The relevance of this topic is determined by the need to introduce innovative pedagogical technologies into fine arts lessons and to develop students' cognitive, creative and visual thinking abilities. The combination of the cognitive approach and frame technology can improve the quality of fine arts education and make the learning process more systematic, interactive and meaningful.

The cognitive approach in education is based on the idea that learning is an active mental process. A student receives information, processes it, compares it with previous knowledge, stores it in memory and applies it in new situations. In fine arts lessons, this process is especially complex because visual, emotional and intellectual elements are closely connected. For example, when students analyze a painting, they pay attention to color, composition, line, rhythm, perspective, characters, symbols and the author's intention. All these elements require cognitive operations such as observation, classification, comparison, interpretation and evaluation. From this point of view, fine arts education creates favorable conditions for the development of cognitive activity. During the lesson, the learner works with visual images, artistic materials and creative tasks. This develops not only practical skills, but also mental abilities. A student learns to notice details, understand relationships between objects, distinguish main and secondary elements, explain artistic meaning and express personal attitude. Thus, the cognitive approach helps to transform fine arts lessons into a process of active thinking and conscious artistic perception. Frame technology is closely related to this process because it provides a structured way of organizing artistic knowledge. In traditional lessons, students may receive information about an artwork in a fragmented form: the name of the artist, the title of the work, the genre, the composition and the color solution. However, if these elements are not connected with each other, students may memorize them mechanically without deep understanding. Frame technology prevents this problem by arranging information in a logical model.

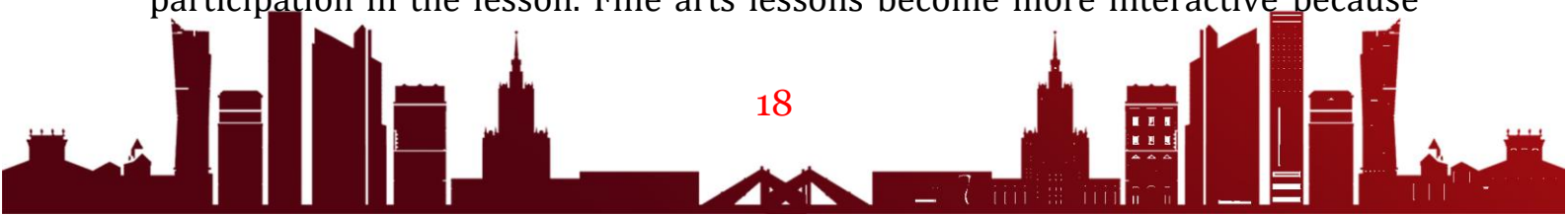
For example, when analyzing a painting, the teacher may use an "artwork analysis frame" consisting of the following components: title of the work, author, historical period, genre, theme, composition, color palette, main images, symbols, emotional impression and educational value. Such a frame helps students understand the artwork step by step. They do not simply look at the picture, but



analyze it according to a clear cognitive structure. This method develops their ability to think systematically and express their opinion in a logical way. Another important advantage of frame technology is that it supports visual thinking. Fine arts education is based on visual perception, and many students understand information better when it is presented in the form of schemes, tables, diagrams or graphic organizers. Frame models make abstract artistic concepts more understandable. For instance, the concept of “composition” can be explained through a frame that includes balance, center, rhythm, proportion, perspective and movement. When students see these components as parts of one system, they can understand the structure of composition more clearly.

Frame technology is also useful for developing students’ creative thinking. Creativity does not mean only spontaneous imagination; it also requires the ability to plan, select, combine and transform ideas. A creative task can be organized through a frame model. For example, before creating a composition on a historical theme, students may fill in a frame with such elements as historical event, main character, background, costume, color mood, symbolic detail and emotional idea. This helps them plan their artwork consciously and avoid random decisions. As a result, the creative process becomes more organized, purposeful and effective. The interrelation between the cognitive approach and frame technology can be explained through several aspects. First, both of them are aimed at organizing knowledge. The cognitive approach studies how information is perceived, processed and remembered, while frame technology gives a practical form to this process. Second, both approaches emphasize meaningful learning. Students do not memorize isolated facts; they understand relations between concepts and apply knowledge creatively. Third, both of them develop independent thinking. When students use frames, they learn to analyze, compare and generalize information without waiting for ready answers from the teacher.

In fine arts education, frame technology can be used at different stages of the lesson. At the motivation stage, a frame may help activate students’ prior knowledge. For example, before studying a new genre, students may complete a simple frame about what they already know, what they want to know and what they expect to learn. At the explanation stage, the teacher may use a frame to present new material in a structured form. At the practice stage, students may create their own frames while analyzing an artwork or preparing a creative project. At the reflection stage, a frame may help summarize the lesson and evaluate learning outcomes. The use of frame technology also increases students’ participation in the lesson. Fine arts lessons become more interactive because





students work with visual schemes, discuss ideas, fill in frames, compare answers and present their conclusions. This method is especially useful for developing communicative skills because students learn to explain artistic concepts using clear arguments. In addition, frame technology can be adapted to individual, pair and group work. In group work, each student may be responsible for one part of the frame, and then the group combines all parts into a complete analysis.

One more important aspect is the connection between frame technology and interdisciplinary learning. Fine arts are closely connected with history, literature, culture, geography and ethics. When students analyze historical paintings, portraits, landscapes or decorative art, they need background knowledge from different subjects. Frame technology helps integrate this information. For example, a historical artwork frame may include historical period, cultural environment, national traditions, artistic style and moral idea. This approach develops students' broader worldview and strengthens the educational value of fine arts. Frame technology is particularly effective in teaching historical and national art. In the context of Uzbekistan and Karakalpakstan, fine arts education has great potential for developing national consciousness, aesthetic taste and respect for cultural heritage. By using frames, students can analyze works connected with national traditions, historical figures, folk art, ornaments and cultural symbols. Such analysis helps them understand not only artistic form, but also the spiritual and cultural meaning of art.

The teacher's role in applying frame technology is very important. The teacher should not use frames as a simple table to be filled mechanically. A frame must guide thinking, encourage analysis and stimulate creativity. Therefore, the teacher should carefully design frame models according to the topic, age of students and learning objectives. The questions included in the frame should be clear, logical and thought-provoking. For example, instead of asking only "What colors are used?", the frame may include the question "How do the colors influence the emotional mood of the artwork?" Such questions develop deeper cognitive activity. The effectiveness of frame technology in fine arts education can be seen in several expected results. Students become more attentive when observing artworks. They learn to identify artistic elements and explain their functions. Their ability to compare different artworks improves. They can express personal opinions more confidently. Their creative tasks become more meaningful and compositionally organized. Most importantly, students develop the habit of thinking systematically, which is one of the main goals of the cognitive approach. However, the use of frame technology should be balanced. If frames are



too complicated, they may reduce students' interest and turn the lesson into a formal exercise. If frames are too simple, they may not develop deep thinking. Therefore, the teacher should use different types of frames depending on the lesson content. These may include concept frames, comparison frames, analysis frames, creative planning frames and reflection frames. The gradual complication of frames can help students move from simple description to independent artistic interpretation.

In conclusion, the cognitive approach and frame technology are closely interconnected in fine arts education. The cognitive approach provides the theoretical basis for understanding how students perceive, process and apply artistic knowledge. Frame technology, in turn, serves as a practical pedagogical tool that organizes this knowledge and supports students' cognitive activity. Through frame models, students learn to analyze artworks, understand artistic concepts, plan creative tasks and express their ideas systematically. This approach is especially important for preparing students who can understand art deeply, respect cultural heritage and express their own creative worldview. In modern education, where creativity, critical thinking and independent learning are highly valued, frame technology can become one of the most productive methods in teaching fine arts.

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