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Ways To Use Visual Educational Technologies To Develop Artistic Thinking In Future Teachers

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ABSTRACT

The modern education system is actively seeking to introduce visual technologies. Such technologies not only enrich the educational process, but also create favorable conditions for the development of artistic thinking in students. In folk pedagogy, great attention is paid to the formation of visual expression, aesthetic perception and figurative thinking through the ancient visual arts, national patterns, applied decorative arts, folk tales and legends. This article reveals ways to use visual educational technologies in the development of artistic thinking in future teachers.

Keywords: Visual education, artistic thinking, figurative thinking, perception, multi-component information environment, multimedia tools, didactic opportunity.

Introduction

According to the American psychologist R. Arnheim, the founder of the term "visual thinking", "visual thinking is thinking under the influence of visual operations." The term "visualization" comes from the Latin *visualis* - seeing, demonstrative perception.

The term "visualization" is derived from the Latin word *visualis*, which means "perceived by the eye", "demonstrable". Visualization is the process of representing information in a visual form in order to ensure a more convenient and faster understanding by a person. This means giving any object, subject, event or process a form that is perceived by the eye, that is, reflecting it in a visible form.

Visualization mainly serves an "illustrative function," that is, it serves to facilitate the understanding of educational material by students. It is aimed at fulfilling the following didactic tasks:

1. Ensuring the intensification of the educational process -

this is to provide students with the opportunity to receive a large amount of educational information without changing the duration of training, while maintaining high quality requirements;

2. Activation of educational and cognitive (knowledge) activities - that is, stimulating students' independent thinking, research, and question-and-answer-based understanding processes;

3. To form and develop critical and visual thinking, as well as visual perception - thereby strengthening students' skills in analyzing, interpreting, and summarizing information received through the eyes."

In order to develop the artistic thinking of future teachers based on visual educational technologies, a number of multimedia tools were used in the experimental process of the research. Multimedia tools are usually understood as sound, animated computer graphics, video images and other similar tools. The specific features of these technologies are as follows:

1. Combining multi-component information media (text, sound, graphics, photos and video) into a single digital form - this integrated approach ensures a holistic and visual presentation of educational material;
2. The ability to store information reliably and for a long time - that is, it is possible to store large amounts of information without corruption when copying it and for years (guaranteed for decades);
3. Simplicity of information processing – this allows the user to conveniently perform processes ranging from simple actions to complex creative operations.

In order to determine the level of didactic and methodological capabilities of visual technologies in developing the artistic thinking of future teachers, information on folk pedagogy was presented using multimedia tools during the experimental process. The following results were achieved based on visual educational technologies:

- obtaining a diagnostic picture of the psycho-emotional state of students, identifying areas of discomfort, as well as identifying compatibility and incompatibility between national values and globalization;
- to liberate students, relieve emotional tension, and create an atmosphere of cooperation and creativity;
- Stimulating student learning activity during the stages of enriching and modifying educational content;
- development of communicative and speech skills;
- enhance motivation for effective speech creativity;
- achieve more effective learning and retention of learning material;
- ensuring the coordinated development of practical, cognitive and aesthetic activities.

The formation of the artistic thinking of future teachers is carried out, first of all, through disciplines of an aesthetic direction. In particular, the discipline of "Folk Pedagogy" is one of these disciplines and is aimed at developing the individual in a creative direction, receiving aesthetic pleasure from examples of folk art, and figuratively understanding national culture. Through this process,

social activity, aesthetic taste, and creative qualities are formed in the individual.

As a result of mastering this subject, a person develops who is creative, thinks in an unconventional way, and is able to observe figuratively. The basic competencies formed during the learning process later serve as a foundation for the formation of artistic competence and preparation for creative activity of future teachers.

Visual educational technologies should be used as a central didactic tool in teaching the subject of "Folk Pedagogy". The following should be taken into account:

- formation of figurative perception through visual materials (photographs of national costumes, patterns, decorations, traditions);
- visual analysis of ethno-art samples (textiles, embroidery, woodcarving works);
- develop visual expression activities based on animated folk tales, legends, and ritual scenes;
- to provide interpretations of national images through slides, collages, and video lessons and guide students towards independent interpretation;
- Organizing classes based on visual-associative methods such as "building a story from an image" and "from emotion to picture."

This will help future teachers develop artistic and emotional thinking, aesthetic perception, figurative understanding, and the ability to interpret individually and socially. The use of visual educational technologies harmonizes the cognitive (knowledge), emotional (feeling), and activity (practical expression) levels of this discipline.

The following stages of using visual educational technologies in the process of developing the artistic thinking of future teachers were identified. Each stage has its own task and purpose, and they form a logical sequence. Therefore, when using visual technologies, multimedia tools were selected based on the content of the topic, the state of the learning environment, the interests and individual characteristics of learners.

The educational material transmitted on the basis of visual

information has its own didactic properties, and for their effective use, the following principles must be followed:

1. Images depicted in the same color (for example, folk ornaments painted only in black and red) are less distinguishable by students. Therefore, the use of contrasting colors - national color combinations such as white and black, green and red, blue and yellow - enhances figurative perception. For example, aesthetic expression is taught through the colors in skull patterns.
2. At the initial stage, it is necessary to limit the number of visual materials. For example, in the depiction of the "Navruz" ceremony, the image can be simplified by using only the main symbols - sumalak, tablecloth, spring flower. Too many elements overload perception and weaken artistic perception.
3. Working with elements of the same shape or size reduces the student's ability to differentiate. On the contrary, analyzing them in the context of folk art through contrasting shapes and sizes (large and small skulls, round and pointed patterns) develops contrastive thinking.
4. When demonstrating the properties of materials, it is necessary to use objects of different physical qualities. For example: a glass bowl (transparency), wood carving (warmth), a metal plate (shiny surface) - through this, the future teacher will perceive the aesthetic essence of national crafts.
5. Tactile perception is required to enhance figurative perception. Students are helped to feel the surface texture and form an emotional connection by touching objects of folk art (for example, embroidered skullcaps, wood carvings, carpet surfaces).
6. It is important to avoid multi-planarity when constructing compositions, especially in preparation for teaching practice. In the first stages, it will be convenient and clear for students to figuratively depict the Navruz or "Yor-yor" ceremony, while maintaining the foreground, middle and background plan.
7. Images organized only vertically or only horizontally create spatial limitations in artistic thinking. Therefore, combining two directions - for example, showing the horizontal structure of a carpet and the vertical image of a tree together - forms spatial-compositional thinking in the student.

Through the aesthetic content of the discipline of folk pedagogy, traditions, national ornaments and ceremonial images, students develop artistic thinking, figurative perception, associative and aesthetic expression skills. The visualization-based approach is enriched within this discipline through visual aids, didactic materials and aesthetic experience and serves the future teacher to mature as a creative educator who is committed to national identity, has a developed aesthetic taste.

When visual educational technologies are used in the educational process, students' interest in learning information and cognitive activity are significantly activated. This technology is aimed, first of all, at presenting information in a convenient and understandable form for them, taking into account the physiological and psychological characteristics of students. It forms in students the ability to think on the basis of "general images", that is, to understand the concept through imagination.

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