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Computer technologies for preparing visual aids with design elements

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Annotation:

The article discusses the issues of preparing visual aids with design elements using computer technology. It is shown that the use of computer technologies for the preparation of visual aids with design elements can be used in the teaching and learning process in order to improve the quality of education.

When conducting classes, the most common means for visualizing information is a blackboard and chalk. Sometimes additional means are used, namely, posters, drawings, paintings, photographic documents, maps, diagrams, tables, etc. With the advent of computer technology, computer graphics, and modern teaching aids, the teacher's work is greatly facilitated to update didactic materials that are periodically needed create in connection with the development of science. This study is driven by the needs of the process of updating the creation of visual aids through the use of computer technology with design elements.

Let's consider the capabilities of Microsoft Office, Open Office and other openly distributed software packages for creating visual aids and processing ready-made images with design elements.

In a modern office, you can create freehand drawings in Drawing mode. Having a special art education, it is possible to create visual aids for almost any discipline. Using the features of the function *Conversion*, you can prepare handouts, posters, drawings for electronic manuals with elements of mathematical, physical, chemical figures and formulas. Design skills in this case make it possible to determine certain combinations of colors that most fully reflect the object of study. For example, it is better to make posters on mathematics in black and white, chemistry with a predominance of blue, and biology with a predominance of green. Color plays

an important role in design and can convey emotion and mood. It can be used to attract attention, highlight important elements, or create a certain atmosphere.

Using the Insert tab allows you to not only include ready-made elements, such as *Figures*, *Badges*, *3D models* or drawings *SmartArt*, but also to process diagrams constructed based on the results of experiments (*Diagram*), use design elements to process images taken with a camera (*Snap-shot*), drawings (*Drawings*), scanned from textbooks or obtained from the Internet.

When creating visual aids in this case, composition plays an important role, which determines the placement of elements in the frame. It includes the arrangement of objects, proportion, balance and direction. Good composition can help create a harmonious and balanced design that is easy to understand. The brain processes large amounts of visual information, filtering out what is unnecessary and highlighting important details. The main object does not have to be large – a bright color, shape, size, expressive texture, contrast against the general background of the picture can attract attention. In composition theory, such accents are called dominants. Thus, the composition is responsible for the first impression of the created visual aid. It directs the gaze, sets the rhythm, makes the image harmonious or, conversely, repulsive.

As already noted, the composition consists of elements that provide the capabilities of modern computer programs. In web design, elements are those materials with which the designer creates a composition. The primary element is space. This is the place where the designer designs the composition, that is, the site page itself.

A separate area that uses design is the development of multimedia presentations. In modern education, electronic presentations have occupied their important niche in the daily activities of an educational organization. A professionally prepared presentation is an integral part of educational activities, promotes new technologies in education, goods and services on the market, and contributes to the most effective delivery of information to students. An electronic presentation, including video, audio and animation effects, combining elements of a catalog, reference book, and textbook, is a modern way of presenting information about the discipline being studied.

Electronic presentations can be divided into those that provide the daily routine activities of the teacher in the workplace (accompaniment of training sessions, reports on the work done) and those that perform advertising functions (educational multimedia presentations distributed on DVD or via the Internet, including high-quality illustrations and video clips about the phenomena being studied, characterized by modern design and complex video effects).

A multimedia presentation is a modern, effective way of presenting educational information, since it combines elements of interactivity, video, surround sound, and three-dimensional graphics. They are used to disseminate information among students and potential consumers of the education system, since they are a ready-made educational product with a well-developed video sequence, music, captions, and narration.

The definition of the concept of an educational electronic publication is made indirectly through the more general concept of an electronic publication, which is a set of graphic, text, digital, speech, music, video, photo and other information. One electronic publication can highlight information (or information and reference) sources, tools for creating and processing information, and management structures. The electronic publication can be executed on any electronic medium, and also published on an electronic computer network. In this case, an educational electronic publication is a publication containing systematized material on the relevant scientific and practical field of knowledge, ensuring creative and active acquisition by students of knowledge, skills and abilities in this field. An educational electronic publication must be distinguished by a high level of execution and artistic design, completeness of information, quality of methodological tools, quality of technical execution, clarity, logic and consistency of presentation. An educational electronic publication cannot be reduced to a paper version without losing its didactic properties.

Due to the specifics of their definition, electronic publications significantly improve the quality of visual and audio information; it becomes brighter, more colorful, and more dynamic.

Modern multimedia technologies have enormous potential in this regard. In addition, when using an electronic publication in teaching, the methods of generating visual and audio information radically change.

If the traditional visualization of teaching implied the specificity of the object being studied, then with the use of computer technology it becomes

possible to dynamically interpret the essential properties of not only real objects, but also scientific laws, theories, and concepts.

Thus, the use of computer technologies for preparing visual aids with design elements can be used in the teaching and learning process in order to improve the quality of education: it is easier for teachers to explain complex elements of educational material, while ensuring a greater understanding of the material being studied by students, making training sessions more attractive, which can lead to better attendance and concentration of students.

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**Влияние западной академической и авангардной живописи
на процесс художественного образования в Китае**

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Аннотация:

В статье раскрывается влияние западной академической и авангардной живописи на процесс художественного образования в Китае. Анализируется эволюция художественной образовательной деятельности, ее постепенное преобразование и превращение в самостоятельную область творчества со своими специфическими задачами и профессиональными методами.

Живопись-универсальный художественный язык международного общения. В каждой конкретной стране на живопись оказывает влияние определенное течение и направления, культурные традиции. Обучение живописи с учетом влияния западных направлений и течений носит свои особенности и актуальна для любой страны. На примере влияния западной академической и авангардной живописи возможно рассмотреть особенности художественного образования в Китае. На современном этапе художественное образование в Китае