

# On the Foundation of Multimedia Applications, Teaching "Information Technology in Construction"

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*Abstract:* This article provides recommendations for further improvement of teaching and learning methods using computer graphics programs in the process of teaching the subject" information technology in construction" using multimedia educational applications and ensuring efficiency.

*Keywords:* Multimedia, technologies, applications, techniques, computer graphics, improvements.

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It is necessary to improve the pedagogical methodology as young people's awareness grows. The distinctions and worldviews of today's students are very different from those of yesterday's students. The accuracy of computer, mobile, and information and communication technology, as well as the development of new linear and hypermedi presentations based on these technologies, can be used to explain one of the primary causes of this. However, this problem cannot be compared in isolation, i.e., according to how the student or pupil is currently receiving these changes. This is the problem that we need teachers to address, and we need to do it in a way that is completely clear, understandable, and straightforward.

Multimedia technologies will focus on the target of how to create the target when teaching the construction. If a student excels in the science we are referring to, "Information Technology in Construction," they will be prepared to master specialty topics. In this respect, it is possible to raise students' scientific accomplishments if we use an effective method of teaching with multimedia technologies, if we construct buildings and structures, and if we use an effective method of teaching with multimedia technologies. There are numerous chances to develop a teacher-training strategy thanks to multimedia technology.

The caliber of the training classes' materials and the expertise of the participating teachers determine how well multimedia presentations work. Therefore, when creating multimedia presentations, pedagogical and useful content should come first (even in the process of presentation). This is because it's crucial to follow conceptual pedagogical guidelines when creating a contemporary lesson with multimedia presentations. [1]

The use of multimedia technology opens up a number of possibilities for improving teachertraining methods and giving students access to special applications that can extend and enrich their learning. Applications that use multimedia can introduce students to other educational methods both domestically and internationally (Figure 1). IJIE | Research Parks Publishing (IDEAS Lab)



Figure 1. Student capabilities.

These days, more businesses recognize the value of multimedia and develop software products that can use media resources to enhance themselves. There are many such applications; let's concentrate on them. In applications for multimedia presentations, Corel Draw enables the drawing of computer graphics on the topic of "Information Technology in Construction." supports three-dimensional graphs and unique effects. This program's primary flaw is the absence of animation; it only functions with static pictures. Consequently, the editing of images, graphs, and diagrams can be done using multimedia tools. [3].

The 3d studio max application, that is, the programs in each window, can see it simultaneously while the object is being created. In a specific view window, you can designate which view is upper, lower, right, right, left, or left. The created object is typically displayed in 3d in the bottom right view [2].

Both offline and internet use of autocad are possible. The majority of the components for standard two-dimensional drawing are present in the program's early versions, but they are progressively replenished and improved. Caused the system to develop into a very useful "electronic sketch board". The system's ability to create an electronic archive of drawings later on is a major benefit when used as a drawing instrument. You can rapidly obtain analog drawings from the prototype drawers thanks to the ease with which each of the drawing files produced in this manner can be edited. Autocad offers password protection and digital signatures as defensive features to stop illegal use of drawings. The decision to use this program was made in response to arguments made by drawings regarding the transfer plan, and the autocrate is the best tool for handling such issues [4].

By using such techniques, it is possible to highlight both theoretical and practical constructionrelated problems in multimodal presentations.

Programs assist students in gathering, sorting, and filing reports on their own data collection and analysis. The establishment of a teacher, pupil, and Mav-zu measurement, or any combination of these three measurements, is done by the teacher using a teaching strategy.

The instructor can employ one or m of m in their lessons. [5]:

- Direct training strategy: instruction, practice, and proficiency are all linked to training, lectures, and presentations.
- > The creation of problems and pupil participation in problem-solving are indirect learning strategies.
- Cooperation and the mental assault are the best examples of the interactive educational approach.
- An experimental method of instruction: the instructor uses hands-on lessons with laboratory

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masks or takes the class to the production line to learn about gathering different design samples.

- Independent educational strategy: instruction in computers, collecting studies and activities, etc. are a few examples.
- Computer teaching strategy: Computer training is a technique for teaching that involves the teacher and student conducting focused interactions while using a computer device. It helps to quickly accomplish the necessary educational objectives. Through the Internet, email, CDs, videos, simulated trips, work games, and other sources like e-learning, the outcomes of education are determined.
- ➤ The focus on teachers is a traditional educational approach. The teacher primarily communicates knowledge to the students.

The use of multimedia resources is a crucial tenet of theory and research, which (perception), the data, research, and knowledge gathered from the surroundings). Numerous studies have shown that computer-based multimedia training materials can enhance the content offered in the teaching and training process relative to conventional teaching and training that is not used by multimedias.

The most effective media for supporting different types of media, as well as student education, are multimedia presentations.

- Multimedia programs with a decent design can accomplish more than just that. The following list outlines the possible pedagogical significance of using multimedia in the classroom:
- To raise the degree of interest: Students are more interested in multimedia and value different media outlets.
- To improve comprehension: Multimedia resources help students better grasp the difficult concepts in science.
- To improve memory: Multimia promotes accurate labeling and simple searches, which support and provide long-term memory.

When a report includes both still and moving images, it becomes much more informative and useful to the viewer. The introduction to a thorough presentation teaches these components in an efficient manner, enabling students to engage in a variety of curricula.

The training's media are categorized based on the feelings they evoked. Media are categorized most frequently into three categories: audio, visual, and audio visual. A multimedia computer was changed as a result of the development of multimedia computers.

Students and teachers need to use multimedia computers to educate computer literacy and provide the right technology. The use of multimedia in the classroom does not supplant the instructor; rather, it enhances oral instruction, board lessons, textbooks, and other teaching aids.

In conclusion, it can be argued that the instructional approach is crucial. However, there hasn't been much done in this area, and most colleges continue to use traditional teaching techniques. To acquire meaning, relevance, and unconditional study, we must give students a supportive and enjoyable environment.

The goal of the multimedia strategy to education is to identify, select, and use various media in the best way possible.

Children must feel worthy of respect. Even the best training program and initiative will fail to meet expectations and be ineffective. Teachers' primary objective has always been to improve educational effectiveness. Teachers employ efficient teaching strategies that are applicable to the individual education technique in order to maximize educational effectiveness. We use multimedia applications to enhance multimedia applications, such as CAD systems and three-

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dimensional modeling components in applications, as part of our "Information Technology in Construction" project. To conquer it is impolitic.

Since science is now a part of daily life, it is essential for students to develop a scientific mindset and to take an active part in multimedia. Creating practical applications and identifying scenarios in which students can learn about the relationships between things and phenomena are protected by science teachers. The teaching process can be made more effective in this manner.

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