



**PROBLEM OF INSUFFICIENT MATERIAL, TECHNICAL AND METHODOLOGICAL  
CONDITIONS FOR TEACHING DRAWING IN GENERAL EDUCATION SCHOOLS IN  
THE CONTEXT OF DIGITAL EDUCATION**

Samarkand State Pedagogical Institute Master's student in *Engineering Graphics and Design  
Theory*

**Yunusova Nafisa Jamshid qizi**

Scientific supervisor:

**Omonov Dilshod Esonovich**

Samarkand State Pedagogical Institute, Professor of the Department of  
"Fine Arts and Technological Education"

**ABSTRACT**

This article analyzes the problem of insufficient material, technical, and methodological conditions in teaching drawing in general education schools within the context of digital education. The study shows that the lack of digital tools and modern methodological approaches negatively affects the effectiveness of the educational process. At the same time, the importance of creating optimal conditions for developing students' creativity and practical skills in drawing classes is emphasized.

**Keywords:** digital education, drawing, general education school, material and technical base, methodological support, educational efficiency, innovative approaches

**INTRODUCTION**

Today, the introduction of digital educational tools provides opportunities to improve the quality of school education. However, in practical subjects such as drawing, the lack of necessary material and technical resources, as well as insufficient methodological support, remains a serious problem. Drawing is not only an aesthetic subject but also one of the key disciplines that develops students' creative and logical thinking. Therefore, to ensure effective teaching, it is necessary to provide modern technologies, visual aids, interactive programs, and methodological materials. Research shows that many schools lack sufficient computers, interactive whiteboards, graphic software, and 3D modeling tools. In addition, teachers' insufficient preparation in modern teaching methods negatively affects the quality of lessons.

**MAIN PART**

The lack of material and technical resources in teaching drawing leads to several problems:

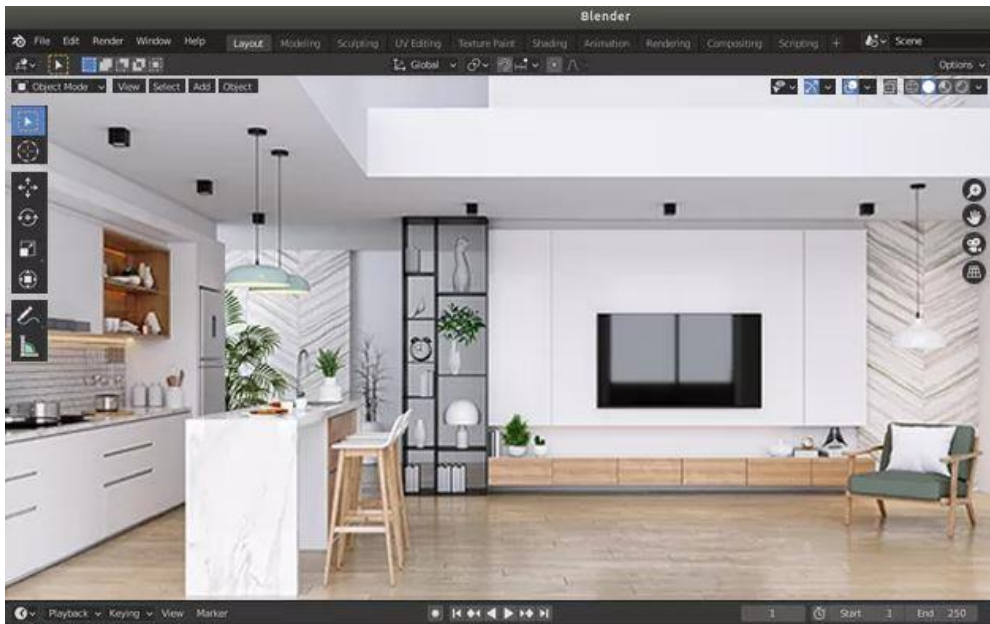
- a) inability to organize interactive and practical lessons;
- b) limitations in developing students' visual thinking and creativity;
- c) difficulties in implementing modern pedagogical technologies.

At the same time, insufficient methodological support reduces lesson effectiveness. For example, the absence of interactive teaching materials and educational programs limits teachers' ability to conduct lessons creatively and practically.

**Necessary Conditions for Modern Teaching**

In the context of digital education, effective teaching of drawing requires the following tools:

- a) interactive whiteboards;
- b) graphic and design software (CorelDRAW, AutoCAD, SketchUp);
- c) computers and projectors;
- d) 3D modeling and printing technologies;
- e) online educational resources.



These tools allow students to gain practical experience, develop design skills, and enhance creativity.

### **Methodological Problems**

Another important issue is the lack of methodological preparation among teachers. Many educators are not sufficiently trained in:

- a) interactive teaching methods;
- b) multimedia tools;
- c) digital technologies;
- d) virtual laboratories.

As a result, lessons are often conducted in a traditional, theoretical, and less engaging format. Students are mainly limited to paper-based drawing, which restricts their creative and practical development.

### **Effective Teaching Approaches**

In digital education, the following methods are considered effective:

- a) project-based learning;
- b) problem-based learning;
- c) interactive lessons;
- d) virtual laboratories;
- e) visual simulations.

These approaches help develop students' independent thinking, creativity, practical skills, and collaboration abilities.



Digital project-based and problem-based learning



Interactive lessons



Digital project-based and problem-based learning



Visual simulations

Additionally, dividing learning materials into blocks, using visual diagrams and presentations, and applying gamification and online interactive tools increase students' motivation and engagement.

### **Proposed Solutions**

To solve these problems, the following measures are recommended:

- a) equipping schools with modern computers and graphic software;
- b) introducing interactive educational programs;
- c) organizing training and professional development courses for teachers;
- d) integrating creative projects and practical activities into lessons;
- e) enriching the educational process with digital resources.

### **DISCUSSION**

The lack of material and methodological support not only affects the quality of education but also limits students' creative development. Without modern tools, teachers are forced to rely on traditional teaching methods, which reduces students' motivation and engagement.

Furthermore, insufficient teacher training in digital technologies makes it difficult to implement innovative teaching approaches.

### **CONCLUSION**

The study shows that the main problem in teaching drawing in the context of digital education is the lack of material, technical, and methodological support.

Providing modern technologies and teaching materials will:

- a) increase lesson effectiveness;
- b) develop students' creative and practical skills;
- c) make the subject more interactive and engaging.

Therefore, it is necessary to strengthen the technical base of educational institutions, introduce interactive programs, and improve teachers' methodological training.

### **REFERENCES**

1. Abdullayev, Sh. (2021). *Teaching Methodology in Digital Education Environment*. Tashkent.
2. Karimova, L. (2020). *Innovative Approaches in Teaching Drawing*. Tashkent.
3. Oripov, J. (2019). *Modern Technologies in Schools*.
4. Tursunov, D. (2022). *Pedagogical Methods and Digital Tools*.



5. Usmonova, M. (2021). *Interactive Teaching of Drawing*.
6. Yunusov, A. (2020). *Development of Technical Conditions in Schools*.
7. Mirzaev, S. (2022). *Effectiveness of Digital Education Tools*.
8. D.E.Omonov, J.T.Kholikov, Sh.X.Egamova., The Role and Importance of Using Graphic Programs in Shaping Students' Knowledge and Skills. *Nexus : Journal of Innovative Studies of Engineering Science (JISES)* Volume: 01 Issue: 04 | 2022 ISSN: 2751-7578 <http://innosci.org/> 45 | Page
9. D.E.Omonov., Conceptual Bases of the Production of Teaching Technologies in Exposure and Practical Training (In the Example of the Engineering Graphics Course) *Pioneer: Journal of Advanced Research and Scientific Progress (JARSP)* Volume: 01 Issue: 04 | 2022 ISSN: 2751-7551 <http://innosci.org> 104 | Page
10. D.E.Omonov., The Role of Engineering Graphics in the Training of "Fine Arts and Drawing" Teachers *Pioneer: Journal of Advanced Research and Scientific Progress (JARSP)* Volume: 01 Issue: 04 | 2022 ISSN: 2751-7551 <http://innosci.org> 108 | Page
11. I.U.Izbosarov, D.E.Omonov, S.Abduvohidova., Stages of Working Thematic Composition in Fine Arts Lessons *Pioneer: Journal of Advanced Research and Scientific Progress (JARSP)* Volume: 01 Issue: 04 | 2022 ISSN: 2751-7551 <http://innosci.org> 112 | Page
12. DILSHOD ESONOVICH OMONOV., Ways to introduce the science of painting to the visual arts using new pedagogical technologies. *International journal of philosophical studies and Social sciences* ISSN-E: 2181-2047, ISSN-P: 2181-2039 <http://ijpsss.iscience.uz/index.php/ijpsss> Vol 1, Issue 3 2021
13. D.E.Omonov., Integration of fine arts and computer technologies in art education of students. *MIDDLE EUROPEAN SCIENTIFIC BULLETIN* ISSN 2694-9970 Middle European Scientific Bulletin, VOLUME 17 Oct 2021 Copyright (c) 2021 Author (s). This is an open -access article distributed under the terms of Creative Commons Attribution License (CC BY).To view a copy of this license, visit <https://creativecommons.org/licenses/by/4.0/>
14. Omonov Dilshod Esonovich., Spiritual values and their importance in human development. *NOVATEUR PUBLICATIONS INTERNATIONAL JOURNAL OF INNOVATIONS IN ENGINEERING RESEARCH AND TECHNOLOGY [IJIERT]* ISSN : 2394-3696 Website: [ijiert.org](http://ijiert.org) VOLUME 8, ISSUE 10, Oct. -2021 199 | P a g e
15. D.E.Omonov., Improving Conversation Classes on Fine Arts in Secondary Schools. *European Journal of Innovation in Nonformal Education (EJINE)* Volume 2 | Issue 2 | ISSN: 2795-8612.
16. D.E.Omonov., The Role of Graphics in the Training of Teachers of "Fine Arts and Engineering Graphics" *European Journal of Innovation in Nonformal Education (EJINE)* Volume 2 | Issue 2 | ISSN: 2795-8612.
17. D.E.Omonov, G. Namozova, F. Rashidov, S. Abduvohidova., Engineering graphic sciences are a conceptual framework for conducting educational technologies in lectures and practical training. In Volume 2, Issue 12 of *ResearchJetJournal of Analysis and Inventions* December, 2021.