

# Effectiveness Of Virtual Laboratories In Technology Classrooms Practical Significance Of Use

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## ABSTRACT

This article talks about the use of virtual laboratories in technology education classes, its unique and effective aspects, conveniences in the process of applying the methodology of developing technological competencies in students.

**Keywords:** Technology, virtual laboratory, digital education, career guidance, material and technical support.

## INTRODUCTION

In Uzbekistan, the years of independence became, in the true sense, a period of educational revolution. Indeed, the scale of practical work being carried out in the preparation of young specialist personnel, the fundamental reform of the education sector, the formation of a comprehensive education system in every respect, and ensuring that the specialists being trained in the field can meet the standards of world education is so broad that it is naturally equal to revolutionary movements. A number of tasks have been defined, such as the introduction of the national program for the development of schools. Based on the above tasks, a number of orders and resolutions were adopted in order to further improve the school education system, to bring educational management in line with the priority tasks of the socio-economic development of our country, to reconsider the meaning and content of personnel training, and to create the necessary conditions for training qualified specialists at the level of international standards.

It is known that the training of competitive specialist personnel who meet modern requirements is one of the urgent issues facing all educational institutions. Solving the complex tasks of educating and upbringing young people depends on teachers' ideological conviction, professional skills, talent and culture, the use of modern pedagogical and information technologies, and bringing

students to mutual activity. In the conditions of accelerating the socio-economic development of our society, this shows that the role and importance of the pedagogical management and management system in developing the independent managerial ability of future young specialist personnel is incomparable.

Every field, regardless of what kind of activity it carries out, requires management and modern management potential. Likewise, the pedagogical process also carries out management and management activities. This process is reflected more in the activities of school principals. Pedagogical management is a science and field of activity that studies the effective organization and management of the educational process and the application of scientific and practical methods of management. It is aimed at managing, organizing and controlling all aspects of the education system. The main goals of pedagogical management are:

- To increase the effectiveness of the education system.
- To manage educational institutions and teachers.
- To improve the quality of the educational process.
- To use resources fully and effectively.

To identify problems in the education system and find their solutions. Its main principles are: Planning — determining in advance the goals, strategies and resources of the educational process. Organization — creating the necessary resources and conditions for the effective organization of the teaching and learning process. Management — regular monitoring and management of the educational process. Evaluation of the activities of teachers and educational institutions. Motivation: motivating and encouraging students and teachers to achieve high results.

### **Conclusion**

In creating electronic textbooks, pedagogical software tools and interactive virtual laboratories, the use of programming languages together with many modern software tools not only corresponds to the work of the creator, but also makes the work of students more interesting and meaningful with the help of such resources. Therefore, these created virtual laboratories make it possible to transfer the traditional laboratory to the level of a new technology corresponding to the current level of development of science and technology. The virtual laboratory created in physics helps students practically test and consolidate the concept of information, information coding, and operations performed on information, which increases the quality of education.

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