



Smart Education: State and Prospects in Uzbekistan

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The Smart Education

- Creation of an intellectual environment for the continuous development of competencies of participants in the educational process, including formal and informal learning process activities, which result in changes in demonstrated behavior by applying acquired new competencies.
- The technical basis for the implementation of such education is the entire available fleet of devices both belonging to students and educational institutions: ordinary desktop computers, laptops, tablets, smartphones, etc.
- The goal is to provide the skills necessary for successful activities in a digital society and smart economy.

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- In January 2019, the Cabinet of Ministers approved the Smart City technology implementation concept in Uzbekistan.
- The main purpose of the Concept:
 - ensuring sustainable growth in the quality of life and the formation of a comfortable urban environment for residents and guests, favorable conditions for doing business;
 - improving the efficiency of public spending, including through the introduction of public-private partnerships;
 - the systematic introduction of all Smart City technologies corresponding to foreign analogues;
 - improving the efficiency of urban services and road transport infrastructure through the introduction of innovative solutions.

The main directions of the Smart City project



1. "Smart Transport"
2. "Clever education"
3. "Smart medicine"
4. "Smart energy system"
5. "Smart water supply and sanitation"
6. "Smart housing and communal services"
7. "Smart construction"
8. "Smart home"
9. "Smart khokimiyat"
10. The Smart Mahalla



«Smart Edukation»



- “Smart education” is innovative technologies, including a set of technological solutions in the form of educational online platforms and massive open online courses, advanced visualization technologies and remote access, complemented by virtual reality, and others.
- The implementation of technological solutions “Smart Education” implies:
 - educational systems based on artificial intelligence with the ability to test students;
 - intelligent face recognition system;
 - distance education and e-learning;
 - electronic magazines at all levels of education;
 - systems for integrating online and offline techniques;
 - adaptive and mobile learning technologies.



Types of education in Uzbekistan



Higher Education in Uzbekistan



- Currently, there are 84 universities in Uzbekistan, including 21 universities, 35 institutes, 2 academies and 15 of their branches in the regions and 7 universities created jointly with foreign higher educational institutions (from the UK, Italy, Singapore, South Korea, Russia).
- According to the Ministry of Higher and Secondary Special Education, in Uzbekistan in recent years there has been a large gap between the demand for traditional higher education (the number of applicants) and supply (the quota of universities).



Higher Education in Uzbekistan

- In 2019, more than 1 million applicants applied to Uzbek universities.
- This is 200 thousand more than last year.
- Coverage of the corresponding age category of the population with higher education in Uzbekistan is about 9%, the global average is 38%.
- The potential of universities to accept a large number of students is limited.

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- Thanks to the Internet there is an opportunity to develop professional higher online education.
- Online education has two main forms.
- The first is the courses offered by universities for obtaining an educational degree, where students undergo training regardless of their place of residence.
- Many universities in the world have been offering online courses for over 20 years in many curricula.
- The second form of online education consists of vocational training, which results in a certificate of completion.
- Such online training is usually intended for professionals or students who want to take special training or prepare for certification exams.

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- Benefits of Online Learning:
 - the ability to provide video lectures with built-in presentations, interactive tasks and the use of other modern educational technologies;
 - short multimedia videos with built-in questions and simultaneous semantic analysis of answers to questions;
 - easily contact the teacher via chat, mail, forum or audio / video communications on the platform for distance learning;
 - filling the shortage of teachers in those areas that are poorly developed in individual educational institutions;
 - Online training makes it easy to choose a convenient time and place for training, as well as your own pace of classes;
 - the ability to access a massive open online course (MOOC) in any environment where there is the possibility of connecting to the Internet, etc.



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- How is E-learning developing in the country?
- Today, Uzbekistan is rapidly developing information technology, which is reflected in electronic education.
- There are some results in the development of distance learning systems, electronic libraries, scientific and educational networks in the development of electronic educational materials.
- The media culture of teachers and students is increasing.
- The development of mobile communications, the development of mobile applications contribute to an increase in the use of this training technology.
- Remote technology is already being used to improve the skills of public education teachers.
- Multimedia textbooks are also being developed in various school subjects.

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- Uzbekistan also focuses on online learning.
- In 2018, the Government granted the right to all universities, institutions of postgraduate education, retraining and advanced training of personnel the right to organize distance learning.
- An online platform has been created on the basis of the Center for the Introduction of Electronic Education.
- It is planned to introduce distance learning for correspondence and evening courses, and at subsequent stages for other directions.
- The widespread dissemination of online education at universities in the republic can provide access to education for many who wish, and will also help to gradually improve the professional skills of those who wish to study, overcoming geographical and time constraints.



Web oriented systems in TUIT

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• Вебга йўналтирилган тизимлар



ESTUDY.UZ (LMS)



FIZIKA.UZ

MediaEDU.uz

TUIT MEDIAEDU.UZ



Профессор- ўқитувчиларнинг шахсий сайтлари

Elearning.zn.uz



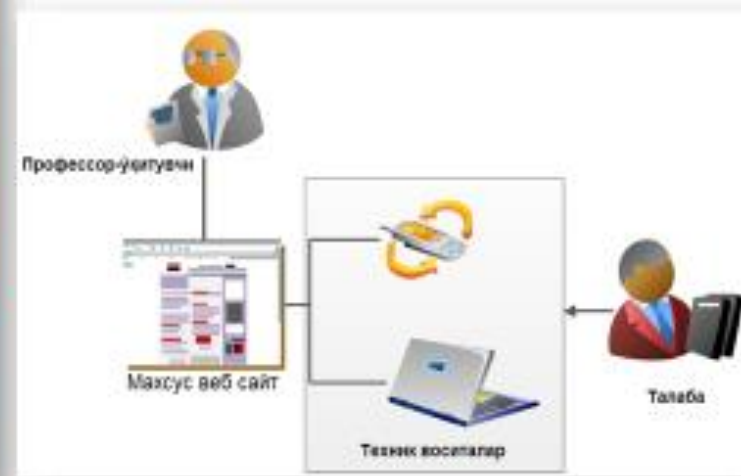
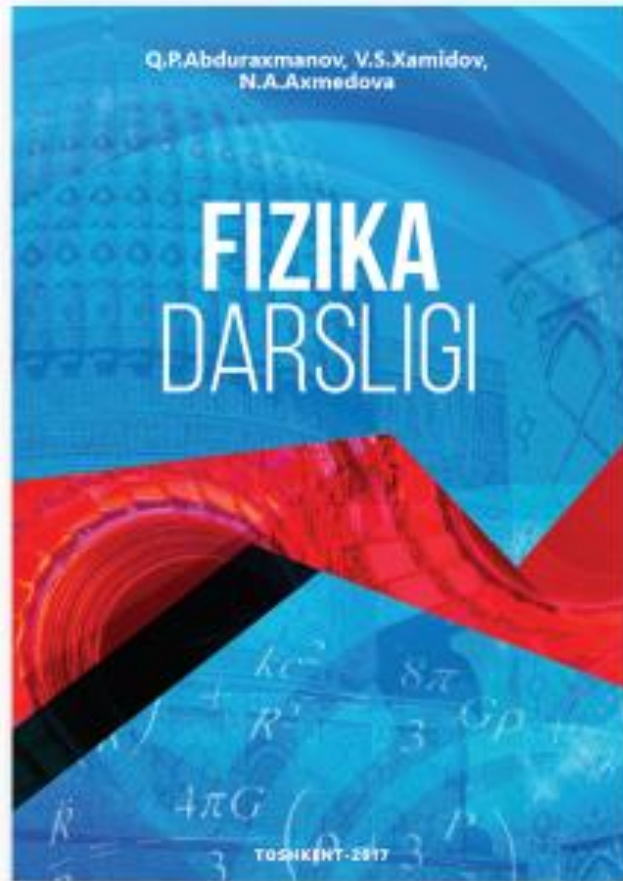
Smart Education in TUIT

- Lms.tuit.uz – Dr. Farkhad Alisherov and prof. Feruza Maxmudova group,
- Moodle.tuit.uz – prof. Akram Nishanov group,
- University corporate networks – prof. Marat Rakhmatullaev group,
- Integrated Anti-Plagiarism System – prof. Marat Rakhmatullaev group,
- Information security of Educational system – prof. M.Rakhmatullaev gr.,
- E-learning: In Physics - Prof. Kakhkhor Abduraxmanov group,
In Electronics - Prof. Ahmed Yusupov group, etc



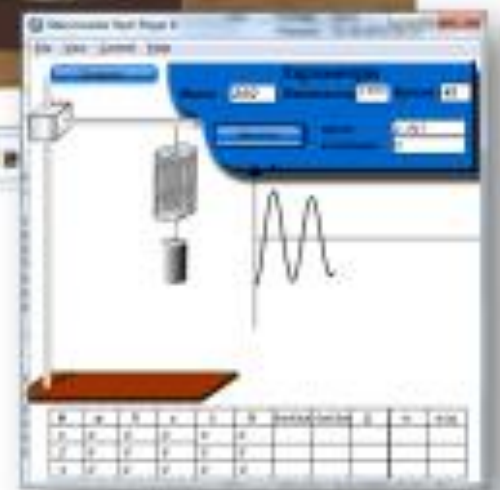
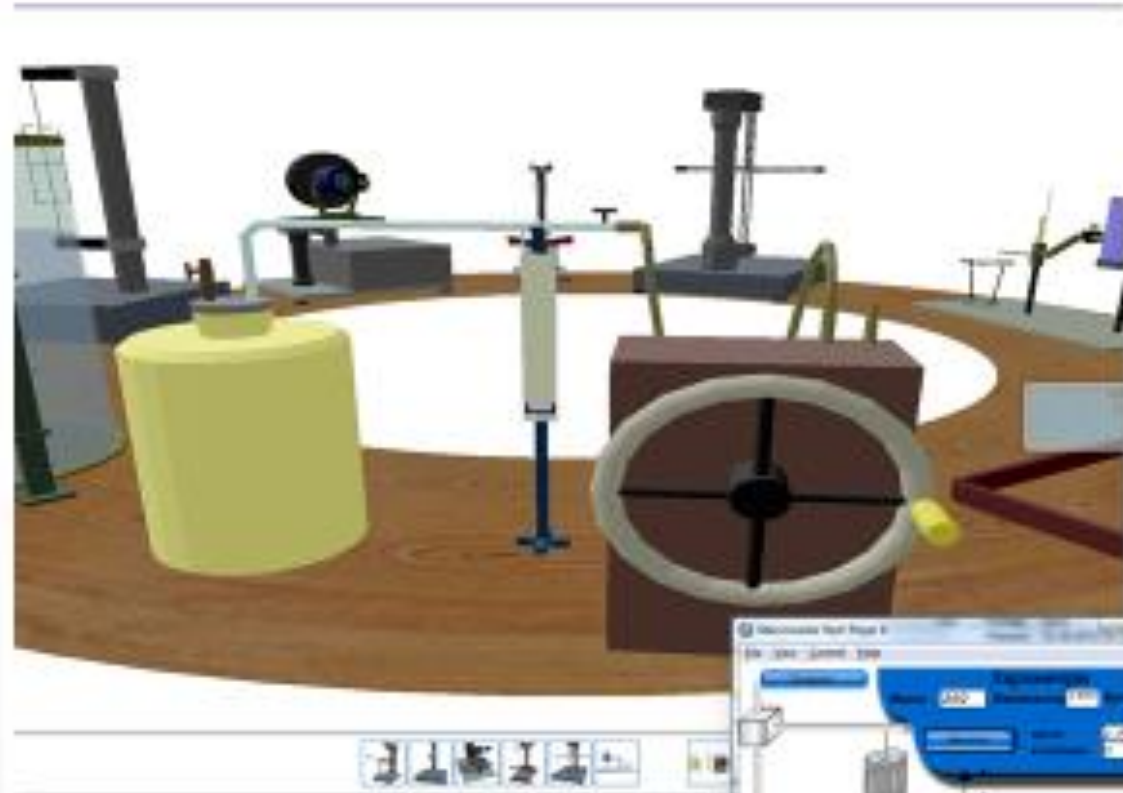
Group of Prof. Kakhkhar Abdurakhmanov has developed a Physics Textbook with an electronic application. Also video lectures on implementation of the laboratory work on physics were created.

«Физика» дарслиги





3D Max va ob'ektlga i'vualtirilgan C#, Php dasturlash tillari yrdamida fizika kursining barcha qismlariga tegishli 24 ta virtual laboratoriya ishlari tayyorlandi



The concept of informatization of higher education in Uzbekistan



- The concept involves the automation of management of the higher education system, the introduction of distance education by 2021.
- From 2019 to 2021, it is planned to develop and implement 35 information systems and databases in universities.
- At the expense of the World Bank, during the academic year 2019/2020, higher education institutions will be provided with servers, laptops, switches and uninterruptible power supplies.
- Preparations are underway for connecting to the e-government system in 2019-2021, as well as the development of electronic resources for online learning of distance learning and evening courses.

Thank you for attention!