



WORLD BULLETIN
PUBLISHING
Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X

Volume 01, Issue 03, December 2025



This article/work is licensed under CC by 4.0 Attribution

<https://worldbulletin.org/index.php/1>

USING SMART TECHNOLOGIES IN TEACHING DIGITAL TECHNOLOGY AND INFORMATICS

Marasulova Zulayho Abdullayevna

Associate Professor of the Department of Digital Technologies and
Artificial Intelligence, Kokand State University,
Doctor of Philosophy (PhD) in Pedagogical Sciences

Abstract

The article highlights SMART technology and its potential for application in the education system. The capabilities of the Smart education environment are presented.

Keywords: Smart education, SMART board, SMART screen, Smart Classroom Suite, Synchron Eyes software package.

Introduction

Efforts to introduce Smart technologies into the education system are being actively pursued in our country. In particular, reforming the structural components of our republic's education system in line with global standards and transitioning to competency-based state educational standards are steps taken along this path. Furthermore, work is underway to equip schools and higher education institutions with Smart classrooms, which include the latest innovative information and communication technologies (ICT) such as large-format interactive whiteboards, computers, student tablets, laser printers, digital video cameras, and other ICT equipment.

The emergence of a SMART (intelligent) society is manifesting itself on a global scale. Countries like the Netherlands, Australia, and South Korea have proclaimed the concept of a SMART society as a national idea and a key political task. The model of a SMART society envisions creating an intellectual, high-



tech, and human-friendly environment using modern information and organizational systems. As time progresses, people acquire new knowledge and find it increasingly difficult to apply this knowledge without information technologies. One of the main goals of education is to achieve quality education by forming a modern education system based on SMART technologies. In the educational process, SMART technologies are considered as a means of delivering knowledge to students and forming an intellectual virtual learning environment through various tools such as smartphones, tablets, and similar devices.

By the 21st century, humanity is rapidly moving towards forming an open information society that provides equal opportunities for everyone to access information. Elements of digital existence such as e-government, e-home, e-commerce, and e-learning have already entered our lives and become commonplace. Now, humanity aims not just to use electronic resources as sources of information, but to utilize them intelligently in an interactive environment. Creating such intelligent, human-interacting and teaching electronic resources is an extremely urgent and challenging task, requiring the combined efforts of the world's most qualified specialists. One significant step in this direction is the Smart education project, which has begun to be implemented worldwide in the field of education.

Smart education (or intelligent education) is a new global, flexible, and individualized educational technology carried out in an interactive virtual environment using open information resources. Its most fundamental characteristic is its implementation on a global scale and the creation of equal opportunities for everyone to access information and receive broad education.

The Smart education environment, in turn, requires its participants to update and systematize the entire educational process, as well as the methods and technologies used. In the past, the teacher was the sole source of learning; the student had to come to the classroom and interact face-to-face with the teacher or read books and learn what they did not understand by asking the teacher. Today, a student proficient in information and communication technologies can acquire knowledge not only from the teacher in the classroom but also from other active



**WORLD BULLETIN
PUBLISHING**
Online Publishing Hub

World Bulletin of Education and Learning (WBEL)

ISSN (E): 3072-175X

Volume 01, Issue 03, December 2025



This article/work is licensed under CC by 4.0 Attribution

<https://worldbulletin.org/index.php/1>

knowledge sources anywhere via the internet. At the same time, the pedagogical and information communication technologies currently used are changing the role of the teacher in the educational process. The teacher's role is now manifested not only as a source of knowledge but also as a guide and manager of the knowledge acquisition process. This, in turn, creates a need for active, convenient, and mobile educational content that has many more advantages than a textbook as a knowledge source. This can be understood even by comparing the volumes of information and educational content placed in books and on the internet. The reasonable use of the information (knowledge) repository in web resources, which is placed on the internet and multiplies every day, every hour, and the full utilization of internet conveniences and technical capabilities have become an urgent task of our time.

SMART education involves implementing the educational process through the use of SMART technologies. Smart education encompasses a comprehensive modernization of all educational processes, as well as the methods and technologies used in these processes. The concept of smart education in the field of education has led to the emergence of technologies such as SMART boards, SMART screens, and internet access from anywhere. Each of these technologies necessitates new ways of creating, delivering, and updating content. Learning activities can be conducted not only in the classroom but also at home, museums, cafes, public places, and any other location. The key element connecting the learning process is active educational content, based on which unified integrated repositories are created, allowing the removal of temporal and spatial constraints. In the education system, smartphones, mobile phones, tablets, and other smart devices can be used in the following areas: obtaining information from online encyclopedias, searching for necessary information, translating words or phrases via translators, visualizing information, watching video lectures, taking online tests or answering survey questions on the internet, conducting various laboratory works and experiments.

The widespread adoption of SMART education is primarily related to the improvement of Internet technologies, secondly, to the development of wireless

 WORLD BULLETIN PUBLISHING <small>Online Publishing Hub</small>	<h1 style="text-align: center;">World Bulletin of Education and Learning (WBEL)</h1>
ISSN (E): 3072-175X	Volume 01, Issue 03, December 2025
	This article/work is licensed under CC by 4.0 Attribution
https://worldbulletin.org/index.php/1	

technologies such as Wi-Fi, 3G, 4G, and thirdly, to the widespread availability of online educational resources on the Internet.

Teachers can use these technologies to communicate with each other and with their students' parents, share professional experiences, enrich lesson content with new materials, increase students' interest in learning, and for their own professional development. Teachers and students become equal participants in the educational process: each of them has the opportunity to access necessary information, and each contributes to the overall research conclusions with the results of their own work.

Using the SynchronEyes software package, the teacher can monitor what students are working on, display all student monitors, block student monitors, and send information from the interactive board to all computers, for example, test materials. Smart Classroom Suite is a software designed for interactive learning. The Smart Classroom Suite interactive learning program is a special software package designed for teachers and students in computerized classrooms. With the Smart Classroom Suite program, teachers can effectively manage the learning process in the classroom and conduct lessons. Easy-to-use tools help teachers prepare engaging multimedia lessons. To solve these issues, the Google system offers the "Play Market" application, which installs the SMART application on a mobile device.

There are a huge number of applications available for each academic subject. For example, simply entering the name of a single subject in the Google Play Market search is enough, and a list of found applications for subjects like English and Russian languages, literature, mathematics, algebra, geometry, physics, chemistry, biology, and physical education will appear on the monitor. Let's look at examples of some mobile applications needed for studying subjects. Students can use these independently to obtain information related to subjects. In conclusion, it can be said that the tools of the Smart education environment are also changing daily. Now, the created possibility of connecting to the internet from anywhere, the emergence and continuous improvement of mobile communication tools, smart boards, smart screens, and other "smart" technical means of education are further enhancing the prestige of active knowledge

 WORLD BULLETIN PUBLISHING Online Publishing Hub	<h1>World Bulletin of Education and Learning (WBEL)</h1>
ISSN (E): 3072-175X	Volume 01, Issue 03, December 2025
	This article/work is licensed under CC by 4.0 Attribution
https://worldbulletin.org/index.php/1	

acquisition in the Smart education environment. Working on interactive boards improves students' concentration, educational materials are assimilated faster, and as a result, each student's mastery of subjects increases.

References

1. Xodjaev B.X., Lecture texts from the module on Innovative Educational Technologies. - T.: 2015
2. Problems of Ensuring the Continuity of the Subject" Compyuter Science and Information TECHNOLOGY" in the System of Continuing Education. Marasulova Zulayho Abdullaevna.
3. Problems of Ensuring the Continuity of the Subject" Compyuter Science and Information TECHNOLOGY" in the System of Continuing Education., Marasulova Zulayho Abdullaevna, 2022/4/30, Open Access Repository.
4. Incessancy and Continuity Training Informatics and Information Technologies at High Schools and Colleges Z. A. Marasulova 2021/12/22 Журнал Interdisciplinary Conference of Young Scholars in Social Sciences.
5. Informatika ta'limda innavatsion texnologiyalar asosida uzviylikni ta'minlash. Z Marasulova, 2011, Fizika, matematika va informatika" ilmiy-uslubiy jurnali.– Toshkent.
6. INTERACTIVE METHODS IN THE TEACHING PROCESS TECHNOLOGY.,3 Марасулова, 3 Мамаюсупова, 2016, Ученый XXI века
7. Непрерывность и преемственность в обучении информатике в общеобразовательных школах. З. А. Марасулова, 2019, Innovations and modern pedagogical technologies in the education system.