Methodology of Teaching the Subject "Information Technologies in Education" on the Basis of Smart Technologies

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Annotation: The article provides a brief overview of the integration of information technology teaching methods in education based on smart technologies and its specific features, education-based approaches, pedagogical integration.

Keywords: Smart technology, integration, theory and practice, approach, traditional lesson, interdisciplinary, student, teacher.

SMART is an intellectual tool like education; SMART - a structure of integrated educational institutions and faculty; SMART is like a new look, i.e. a new approach to education, allowing for higher results or more effective methods; SMART is the improvement of human personality in the context of the formation of new smart competencies.
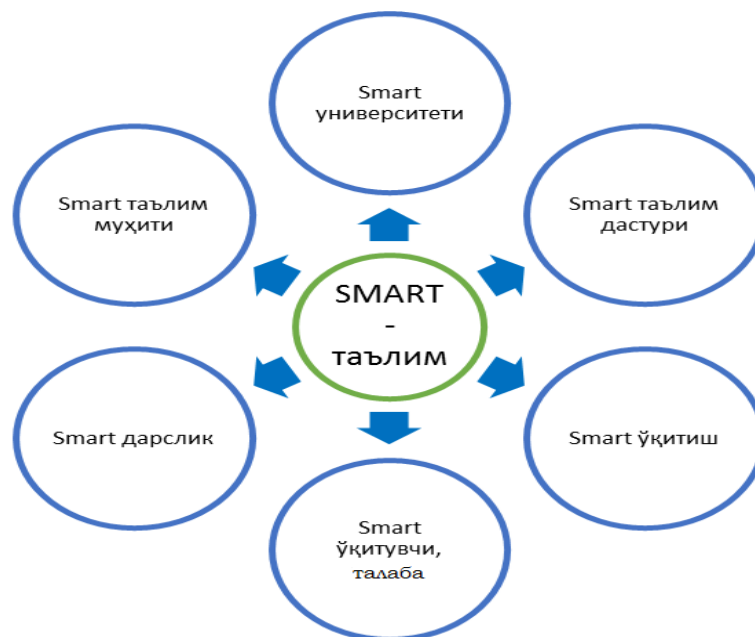

Figure 1.1. SMART - elements of education.

A number of scientists from foreign countries and our country are studying the problems of teaching the subject "Information Technology in Education", developing educational computer programs and implementing them in the educational process. Despite the effective work on raising the level of work in this area to the level of modern requirements, the following problems remain: The lack of textbooks and manuals in Uzbek on the subject of information technology in education, including electronic versions, and the existing ones do not meet modern requirements; lack of e-learning resources in science; the lack of methodological guidelines for practical, laboratory and independent study.

In overcoming the above problems and developing a system of professional knowledge development for future professionals, first of all, methodological, professional, motivational, pedagogical, psychological, systematic, theoretical-scientific, creative-practical, self-assessment, independent learning, the prospects of professional success factors such as cognition need to be considered.

Since the distinguishing features of modern higher education are its flexibility, efficiency and practical orientation, such knowledge exchange means the transition from the reproductive transmission of traditional knowledge to the form of creative education with its innovative methods, forms and tools. Smart learning is a key condition for the emergence of flexible learning, which works in an interactive learning environment using content that is publicly owned worldwide.

From the emerging Smart - education system: in full-time education - in the quality and effective organization of independent work of students; in distance learning; in improving the skills of specialists; can be used successfully in the general non-formal education system of the population.

**Figure 1.3. SMART is a technology structure in education**

If we describe the SMART-learning platform in general, SMART-learning is an ideology, which in turn consists of three links. These are:

1) SMART environment - an intellectual virtual learning environment based on innovative technologies;

2) SMART pedagogy armed with innovative methodology;

3) SMART skills with an advanced educational goal. (See Figure 1.4)

SMART pedagogy is the process of organizing person-centered, collaborative and contextual learning in customized classrooms.

SMART skills include activities such as defining, learning and implementing these goals and essence, collaboration, creativity, and problem solving. While smart pedagogy is inextricably linked with intelligent ability, including the intellectual virtual learning environment, it forms

intelligent pedagogy, which in turn appeals to the activity of intelligent abilities in order to increase motivation.
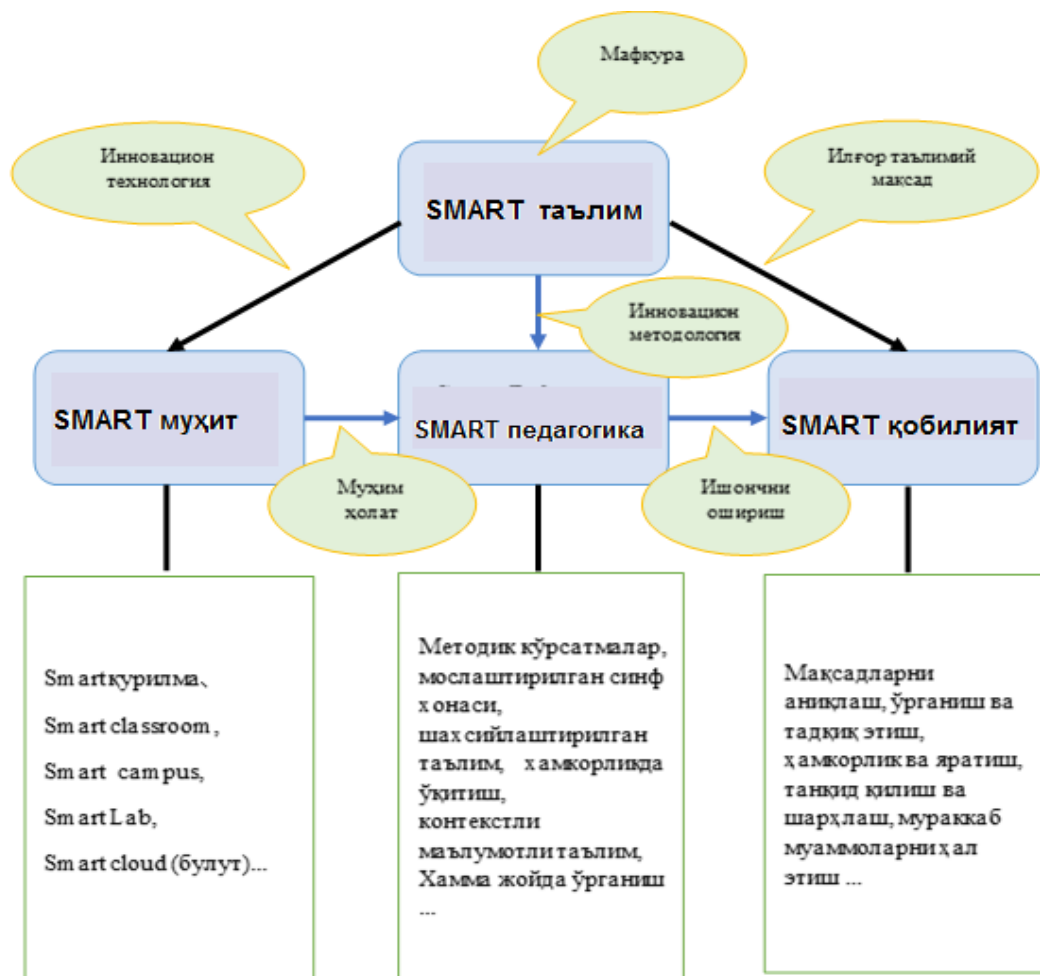
Figure 1.4. SMART-learning platform

We believe that the following requirements should be met in the development of an integrated electronic textbook on "Information Technology in Education":

1. General pedagogical requirements: e-learning materials should correspond to the content of the subject according to the structural structure; e-learning materials should have a system that allows students to develop intellectual abilities, tasks that require problem-solving and creative research; Methodological requirements - the training material should be presented and structured based on the interdependence of the conceptual, figurative and motor components of thinking; students should be able to gradually master the learning material while using the electronic information educational resource.3. Psychological requirements - virtual presentation of educational material should correspond not only to the verbal, but also to the sensory (emotional) and visual states of the cognitive process; To serve the development of figurative and logical thinking skills in students in the educational and information resource in electronic form.

4. Technical requirements - one lecture in the module of information technology in education consists of a standard, ie no more than four or five pages of text, the volume of control tests (questions and assignments) should be up to 10 for one lecture. When creating an electronic information educational resource, sketches of scenarios and pictures should be divided into frames as much as possible. 5. Software requirements - the software part of the electronic information

educational resource should be in WEB instrument format; the possibility of simultaneous access of several users to the information in the database of electronic information educational resources; use of system WEB-servers; the environment in which the e-learning resource runs Windows 7 and above; use a server to store and process data; use of multimedia tools (audio, video, etc.) and so on.

Taking into account the above principles, in an integrated learning environment armed with SMART-technologies, the goal is to create an e-learning educational resource on the subject of information technology in education and apply it in the educational process.

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