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ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫ<mark>лым министрлигі</mark> МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ <mark>РЕСПУБЛИКИ КАЗАХСТАН</mark>

М.ӨТЕМІСОВ АТЫНДАҒЫ БАТЫС ҚАЗАҚСТАН МЕМПЕКЕТТІК УНИВЕРСИТЕТІ



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тілдік қатынаста, біріншіден, өз мүддесіне сай тілдесімнің мақсаты мен маңызын анықтауға, екіншіден сөзінің қисыны мен дәлдігін мөлшерлеуге, үшіншіден пікірін дәлелді, дәйекті, түсінікті жеткізуге дағдыланады. Білім алушылардың белгілі бір табысқа жетуіне, танымдық қызығушылықтарының дамуына, дүниетанымдық көзқарасының қалыптасуына, коммуникативтік мәдениетін тәрбиелеуіне, өзін-өзі бағалауына септігін тигізеді, білім алушылардың сабақта ізденуіне, жеке тұлғалық қасиеттерінің дамуына, шешімді таңдаудағы еркіндігіне жол ашады, түрлі жағдаяттардан жол тауып шығуға үйретеді. Осы мақсаттарға жету үшін сабақтың ұйымдастырылуы, әдістері, педагогикалық ұстанымдары дұрыс болуы тиіс. Қазақ тілін интерактивті оқыту технологиясының дидактикалық, психологиялық талаптар негізінде ұйымдастырылуы мұғалімнің шеберлігіне байланысты.

Интерактивті оқыту технологиясының моделі: проблемалық шығарма әдістері, презентация, пікірталас, топпен жұмыс, миға шабуыл әдісі, сыни тұрғысынан ойлау әдісі, викториналар, мини зеттеулер, іскерлік ойындар, рөлдік ойындар, тренинг т.б. Инновациялық технологиялар оқытудың интерактивті әдістерін ұтымды қолданумен байланысты. Қай әдісті қолдану түрлі себептерге: сабақтың мақсатына, қатысушылар мен мұғалімнің тәжірибесіне, олардың талғамына байланысты.

Қоғамымызда болып жатқан оң өзгерістер білім беру жүйесінде де білімді, саналы, қоғамда өз орнын таба білетін тұлға қалыптастыру ісіне деген қатаң талап қойып отыр. Әлемдік аренада бәсекелестікке қабілетті мемлекеттің дәрежесіне жету үшін, бүгінгі жас ұрпақ зияткерлік құзырлықты, өз бетімен білім алуға қабілетті, озық технологияларды жетік меңгерген, жеке тұлға ретінде толық қалыптасқан мәдениетті азамат болуы тиіс. Осындай тұлға қалыптастыру үшін алдымен әр мұғалім психолог болуы шарт. Өйткені, әр баланың психологиясын жақсы білмейінше, оларға білім беру де, дұрыс тәрбие беру де мүмкін емес. Яғни, оқушының жеке тұлға ретінде мінезіне, психологиялық ерекшеліктеріне, тұлғалық қасиеттеріне, сана-сезіміне, ой-өрісіне де көңіл бөлу қажет. Сонымен қатар интерактивті оқыту әдістері арқылы білім алушылардың қазақша сөздік қорын молайтып, сөйлеуге, сауатты жазуға дағдыландыру лингвистикалық білім негізінде жүргізіледі.

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#### Benke A.A.

# THE INTERACTIVE METHODS WHICH ARE USED FOR THE FORMATION OF CADETS EDUCATIONAL SKILLS

The main principles of interactive methods are given in this article. There are comprehensively considered the concepts of speaking, writing, audition, reading. The value of interactive methods is investigated. Also special attention is paid to pedagogical technologies in education. Values are differentiated in studying of language.

**Key words:** speaking, writing, audition, reading, innovations, interactive methods of training, creativity, studying of language, lesson, collective, cadet, to know, exercises.

# Бенке А.А. РОЛЬ И ЗНАЧЕНИЕ ПРИМЕНЕНИЯ ИНТЕРАКТИВНЫХ МЕТОДОВ В УЧЕБНОЙ ДЕЯТЕЛЬНОСТИ

В данной статье представлены основные принципы интерактивных методов. Разносторонне рассматриваются такие понятия как говорение, письмо, аудирование, чтение. Исследуется значение интерактивных методов. Также особое внимание уделено педагогическим технологиям в сфере образования. Анализируется значение изучения языка.

**Ключевые слова:** говорение, письмо, аудирование, чтение, инновация, интерактивные методы обучения, творчество, обучать языку, занятия, коллектив, курсант, овладевать, упражнения.

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#### SMART, AS A NEW APPROACH IN THE EDUCATION SYSTEM

Annotation: The article deals with the concept of smart education and its main elements: smart-learning, smart-University, smart-textbook. It describes the prerequisites for the implementation of smart-education system and analyzes the factors that affect the formation and development of the concept of smart-education. The analysis of tendencies of development of the sphere of educational services is given. Three aspects of smart education progress are determined: organizational, technological and pedagogical.

*Key words*: smart-education, software, e-learning, smart-learning, smart-University, cloud technologies.

Each era creates its own kind of education so the middle ages created a "labor education" - teaching professions directly in the process of labor activity, and the era of industrial society has created a class-term system of "academic education" - teaching professions in isolation from direct production in special educational institutions. "Industrial education" was fully built according to the requirements of production, labor market and was focused on the development of various professional Affairs, characteristic of the era of knowledge and Executive reproductive activity.

The current trend in education requires a completely new approach to solving the traditional problems of mankind:

- specific individual;
- formation of a new culture of knowledge;
- science, production, education, national health, ecology, habitat, etc.;
- organizational structure of the society.

Permanent formation of the existing system of "industrial (class-oriented) education" due to the massive introduction of information and software, automated training systems that use outdated pedagogical technologies, create the appearance of innovation in education, i.e. mass traditional education required reform.

Post-industrial civilization should create its own kind of education, using the tools of the fifth technological order, and not continue to exploit industrial education under various pretexts of its renewal.

Intensive development of information technologies has led to the fact that "classical" e-learning has been replaced by smart-education. The concept of smart-education (smart-education) is currently associated with a set of concepts, many of which have no

unambiguous interpretation. Publications on the topic of smart education appeared just a few years ago, and they record the key trends in the development of education, at the same time, futurological forecasts of subsequent changes in the educational system were created. However, these publications themselves today represent a series of examples of system solutions and technologies in the field of education than the paradigm formed. This situation creates conceptual and conceptual uncertainty, which does not allow unambiguously refer this or that phenomenon to the field of smart education [1].

Having studied the state of research in the field of smart education, it can be noted that a comprehensive study of its major aspects has not actually been conducted. The very concept of "smart education", if we compare it with the concept of "e-learning", is practically not common in foreign and Kazakh scientific literature. Having studied some literature, we can say that most studies provide specific examples of systems and solutions that relate to the field of smart-education. Examples of the implementation of various systems in the field of education, which implement the paradigm of smart-education, are presented in the works. In some of these works, as well as in articles and studies, a number of features that are characteristic of systems that comply with the principles of smart education are considered [2].

The ability to perform intelligent actions is not the only value of smart education, it also represents the external beauty without that is why the concept of smart works so well in relation to various gadgets: it shows an idea of the relationship between aesthetics, ergonomics and intelligent functions. At the same time, understanding smart-education as something "smart", it is expected from them to simulate intelligent behavior. Accordingly, the ability to some intelligent functions along with ease of use are expected from smart technology. Therefore, it is impossible to identify artificial intelligence systems and smart technologies.

Smart technologies are the "visualization" of intelligent systems, we can say that they are born at the intersection of the disciplines of Artificial intelligence and Humancomputer interaction. Consequently, their "intelligence" is subject to the same limitations that underlie intelligent systems. One of these limitations is the algorithmic nature of the work, which, even when the system is learning (if it is not a neurocomputer system), limits its learning pathways. Intelligent systems automate routine actions to find and systematize information, but do not perform those spontaneous intellectual functions that require human intelligence. They speed up its operation, but not the actions of any smart system require proper organizational decisions and non-trivial intelligent procedures, at the same time, they contribute to the creation of special organizational structures that become the main smart education [3].

At the new stage of social development, the attention of managers, the public is moving from assessing the effectiveness of the development and implementation of information and communication technologies (ICT) towards the person creating new efficiency through a new information culture. The humanitarian values of society, education, economy come to the fore, as only reasonable and appropriate use of ICT can change people's lives for the better.

Smart, as a property that allows you to immediately adapt the object or process to changes in the environment, becomes the most popular in modern social development and especially education. The formation of a new concept of smart-education is based on the achievements of information and communication technologies that allow to achieve new economic and social effects in the education system and achieve new efficiency. The formation of the concept of smart-education is evidenced by the emergence of regular conferences on the subject of smart-education and smart-training [4].

The influence of human capital is no longer sufficient for the development of modern education. It is necessary to change the educational environment itself, not just to increase the volume of education of the labor resources, the very content of education, its methods, tools and environments should be qualitatively changed, a universal transition to SMART education is necessary.

Currently, it is becoming the norm to conduct training sessions with students using multimedia presentations made by in software packages such as Microsoft Power Point or Macromedia (Adobe) Flash. However, along with the usual presentation technologies in the sphere of education is penetrated by new, so-called interactive technologies that allow you to get away from the presentation in the form of a slide show. A new form of presenting the material using the interactive equipment (interactive whiteboards, Smart Boards, interactive displays, Sympodium) it is a presentation created by the speaker during his speech is a presentation created here and now. On the interactive whiteboards Smart Boards you can write a special marker, show training material, make written comments on top of the image on the screen. In this case, everything written on the interactive smart Board is transmitted to students, stored on magnetic media, printed, sent by e-mail to students absent from the classroom. The training material created during the lecture on the smart Board interactive Board is recorded by the built-in video recorder and can be repeatedly played.

There are several technologies to make the Board interactive. One technology – sensor resistive, the other – DViT technology of Smart Technologies. It uses special digital video cameras located at the corners of the screen. In addition, with the help of a special nozzle, you can turn any plasma panel into an interactive Board. Of course, special software (Smart Notebook, Bridgit, Synchroneyes) has been created to maximize the implementation of all the properties of smart Boards. Each of these programs has its own characteristics. Smart Notebook lets you work with text and objects, save information, and turn written text into printed text. Bridgit program allows you to easily and quickly make presentations to partners around the world, get feedback on your document. Once you highlight the key positions of your speech on the common desktop, the program immediately displays all your notes on the screens of other participants in the conference in real time. With the help of the Synchroneyes software package, the teacher can monitor what students are doing, display all their working monitors on the Board, block their monitors, send educational material from the interactive whiteboard, for example, a test, to all computers.

Smart-education consists of accumulated and developed approaches to learning in their traditional sense with the use of electronic technologies, but is not limited to them. None of the previous approaches used in education did not imply an immediate reaction of the learning process to changing conditions in the external environment.

The concept of smart education implies a comprehensive development of educational services including staffing, administrative and legal management, material and technical base and pedagogical design. To build a conceptual map, a Central concept is chosen, which in this case is smart education. Other concepts included in the concept are connected with the system of certain relations with the Central concept. The types of communication between concepts can be different.

Smart education is defined as an educational system that is provided on the basis of the Internet, interaction with the environment and the process of training and education for the acquisition of necessary knowledge, skills, abilities and competencies. Smart education provides an opportunity to take advantage of the global information society to meet their educational needs and interests.

The basic principles of smart-education:

1. The use of relevant information in the educational program to solve educational problems. The speed and volume of information flow is rapidly increasing. In order to prepare students to solve practical problems, to work in a real environment, it is necessary to Supplement existing educational materials with data coming in real time.

2. Organization of independent cognitive and research activities of students. This principle is key in the training of specialists ready for creative search for solutions to professional problems, independent information and research activities.

3. Implementation of the educational process in a distributed learning environment. Today, the educational environment does not end with the territory of the University, or outside the distance learning system. The learning process is continuous, comprising learning in a professional environment, using the means of professional activity.

4. Interaction of students with the professional community. Professional environment is considered not only as a customer for training, where the student becomes an active participant in the learning process, using information and communication technologies.

5. Flexible educational trajectories, individualization of learning. Today, in connection with the transition to student-centered learning, students who come to the University are well aware of and formulate their need for education. The task of the University is to provide educational services in accordance with the needs and individual capabilities of the student.

6. Educational activity requires the provision of great opportunities for students to study educational programs and courses, the use of all abilities, knowledge and skills of the student, in accordance with the possibilities of health, material and social conditions.

Due to three aspects of progress in smart-education:

- technological, suggesting that the main difference is in the technologies used;

- organizational, assuming that the organization of the educational process determines to what kind of education;

- pedagogical, focused on the form of submission of material, formed skills and learning outcomes.

These types of approaches, in General, correspond to what is convenient to designate the concept of "smart-education measurements". This concept is defined as the essential aspects of smart-education involved in the formation of its integral system.

The technological (ICT) dimension of smart education draws attention to the fact that the development of technologies in itself inevitably leads to changes in education that fall under the concept of smart. These changes are initiated by those who are directly involved in the educational process, but does not regulate it and does not create a regulatory framework. For example, the use of social networks in the educational process is an initiative of teachers and students. No regulation, no "official" inclusion of social networks, for example, in the existing LMS (Learning Management System, with the English. learning management system) University does not occur. The main feature of the technologies on the basis of which smart-training is developing is their interactivity, ability to data mining, etc. Another important point is the ability of modern ICT to personalize data, create, in fact, a virtual identity of the user, which are focused automatically generated as a result of search queries offers, especially in the field of marketing and advertising.

From a technological point of view, it is easy to distinguish smart education from traditional education and somewhat more difficult from e-learning, which also uses ICTs. Traditional training involves the process of learning "face to face", includes the use of certain multimedia content, but its use is limited. The main characteristics of ICT compliance used in smart-learning are compatibility between software developed for different operating systems, independence from time and place, mobility, ubiquity, continuity, providing easy access to educational information, the autonomy of the teacher and the student through the use of mobile devices access to educational information.

Next, the organizational dimension of smart education. The education system includes several main components: educational programs of different levels and directions, educational standards and requirements, rules of organization of the educational process, which are regulated by the legal framework, forms of organization of training (targeted organization of content, teaching tools and methods), successive forms of educational programs of different levels and directions, bodies that manage the education sector, and subordinate institutions and organizations, types of educational resources. To create a system of smart education, all these components of the education system should be subject to the General principles. Special attention should be paid to the management of

educational content and educational resources in smart education. E-learning materials will be regularly updated and updated by teachers, supplemented with relevant information. This means that students can study the relevant material, become professionals who know the current level of professional development.

Both technological and organizational aspects are necessary for the formation of the third aspect of smart education, a system of appropriate cognitive competencies, General cognitive competence of students, i.e. pedagogical dimension. Automation of certain intellectual processes and functions presupposes a special value of what is impossible to algorithmize, a unique, non-trivial view of things, the ability to form one's own view in the process of communication, etc.

Smart-education system, which uses in its implementation promising high-tech educational technologies, innovative pedagogical solutions and social technologies, as well as new information and communication tools fully meet the requirements of post-industrial society.

Thus, the critical problem of education in the creation of a new culture of knowledge can be solved on the basis of the development of systems built on smart technologies.

Today, the world and Kazakhstan have the necessary prerequisites for the successful implementation of the smart-education system:

- created well-focused on solving the problems of smart education, information and software;

received fairly widespread cloud technology;

- management systems for the creation of educational resources, such as Moodle, have been developed;

- the Internet has become widespread in recent years.

These approaches refer to the concept of "measurement smart - education". And it is defined as the essential aspects of smagt - education, which are involved in the formation of its integral system.

Technological dimension of information and communication technologies of smagt education draws attention to the fact that the development of technologies anticipates changes in the field of education, which are part of the concept of smart. These changes are projected by those who participate in the educational process, but do not constitute it and do not create a regulatory framework. So today the sphere of educational services demonstrates student-centered learning and in accordance with this, some teachers on student initiative use social networks in the educational process. That is, the inclusion of social networks officially in the existing LMS (Learning Management System, c eng. learning management system) of the University is not allowed. The main feature of smartlearning technologies is their interactivity, the possibility of data mining, as well as the ability of modern information and communication technologies to determine the data for certain objects, to develop a virtual personality, which are automatically generated as a result of search queries offers.

From a technological point of view, it is easy to distinguish smart education from traditional education and somewhat more difficult from e-learning, where information and communication technologies are used. Traditional training is presented as a learning process "learning-learner" and includes the use of multimedia content. The main characteristics of compliance of information and communication technologies used in smart-learning are to ensure compatibility between the software developed for different operating systems, that is, corresponding to the criteria of independence from time and place, mobility, ubiquity, continuity, providing easy access to educational information, autonomy of the training and the student using mobile devices access to the necessary educational information. A special place is occupied by the management of the content of education and educational resources in smart education. E-learning materials should be systematically corrected, updated and supplemented with up-to-date information and

relevant data. This implies that students study the relevant material, become professionals who know the current level of development of professional activity.

Technological, and organizational aspects necessary for the formation of the third aspect smart education system relevant cognitive competencies, General cognitive competence, i.e. pedagogical dimension. Automation of certain intellectual processes and functions presupposes a special value of what is impossible to algorithmize, a unique, nontrivial view of things, the ability to form one's own view in the process of communication, etc.

The system of smagt - education fully meets the requirements of post-industrial society and uses promising high-tech educational technologies, innovative pedagogical technologies, as well as new information and communication tools in its implementation.

Thus, the critical problem of education in the creation of a new culture of knowledge can be solved on the basis of the development of systems built on smart technologies.

In the wake of the rapid development of information and communication technologies of the end of the last century, the "digital generation" has grown, for which smart devices and gadgets using "advanced" technologies are mandatory elements of the living space. The transition to a wireless network, the spread of smart terminals, the progression of smart devices, the expansion of the mobile office is a new quality of society in which the combination of the use of trained people of technical means, services and the Internet leads to qualitative changes in the interaction of subjects, allowing to obtain new effects: social, economic, educational.

Many other States have taken a course on the development of smart education today. The model of the new smart society implies the creation of an intelligent, high-tech, comfortable environment for humans with the help of modern information and organizational systems. Every year a person acquires more and more new knowledge, which he is no longer able to reproduce without the help of information technology. One of the main tasks of education is the formation of a modern education system based on smart technologies, the main goal of which is to achieve quality education.

Through Smart learning, conditions are created for the implementation of the UNESCO proclaimed leading principle of education of the XXI century "education for all" and "education through life" – "Life Long Learning". Smart training will increase the availability of education "always, everywhere and at any time".

At present, Kazakhstan has formed the basis for the successful implementation of the smagt - education system, i.e. well-oriented information and software tools have been created, cloud technologies have become widespread enough to speed up the process of work and management systems of educational resources, such as Moodle, have been developed.

Smart technologies have great potential to become a priority production technology that ensures the economic development of society. A distinctive feature of smart technologies is their ability to respond instantly to changes in the environment. In the context of dynamically developing technologies and information environment, the number of environmental factors and the speed of their change is constantly increasing. Thus, the property of "smart" becomes popular in the management of many processes and systems, including education. The need to form the concept of smart education is confirmed by the development of ICT and the educational environment, transformations in society. At the moment, there is a growing gap between the potential use of ICT, the willingness of students to use ICT in the educational process, and their implementation in vocational education. Technological, economic and social factors determine the need to create the concept of smart education [5].

A key element of the concept of smart education is smart learning, which is impossible without the accumulated experience of e-learning. The main task of smart learning is to create conditions for obtaining new efficiency in the educational process. New efficiency is achieved by students studying the University program, teachers and the