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SMART-TECHNOLOGIES IN THE PROCESS OF TEACHING THE RUSSIAN LANGUAGE

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Abstract. Relevance. After the pandemic, there is a kind of disintegration of traditional education. Consequently, there is a need to introduce new methods, innovations and teaching aids in the educational process. Aim. The purpose of the study is to determine the basic concepts of SMART and its role in society; the need for its use of SMART technologies in Russian language lessons is also revealed. Methods. In this article were used methods of abstraction and concretization, statistics, comparative analysis, work with documents and forecasting, questionnaires. Results. The types of SMART-technologies, their area of application are analyzed. Conclusion. Conclusions are given on the forms, methods and means for the use of SMART technologies in the lessons of the Russian language.

抽象的。 关联。 疫情过后，传统教育出现了一种解体。 因此，需要在教育过程中引入新的方法、创新和教具。 目的。 研究的目的是确定SMART的基本概念及其在社会中的作用；还揭示了在俄语课程中使用 SMART 技术的必要性。 方法。 在本文中，使用了抽象和具体化、统计、比较分析、使用文件和预测、问卷调查的方法。 结果。 SMART 技术的类型及其应用领域进行了分析。 结论。 结论是关于在俄语课程中使用 SMART 技术的形式、方法和手段。

1 Introduction

When it comes to entering the information age, the stages of introducing information and communication technologies (ICT), their application in the real educational process, the creation of a modern information infrastructure, the creation of completely new multimedia curricula and their implementation in education - all this is slowly coming to an end.

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Here a natural question arises: how to evaluate the knowledge and experience gained, what should be the next step? For example, problems associated with the use of ICT in traditional educational processes, including: an increase in the number of informal educational associations in the global Internet networks, "virtualization" of "real" educational institutions, exchange, distance learning, etc.

At the current stage of ICT development, not only classical educational technologies are needed, but also e-learning. The transition from e-learning to smart (e-learning) and smart education is underway. This concept unites all processes in the field of education, as well as a comprehensive modernization of all methods and technologies used in this process. The SMART concept brings with it technologies in education such as smart board, smart screen, Internet access from anywhere. Each of these technologies allows you to rebuild, deliver and update your content development process. As a result, training can be carried out not only in the classroom, but also at home, at work, in public places and in recreational areas (13). The content of active learning becomes a key element in the assessment of the educational process. On its basis, a single repository will be created that will remove the barriers of the concepts of time and space.

2 Materials and methods

The use of ICT and SMART technologies, innovative approaches, informatization of the educational process has been studied by scientists A.A. Aletdinov (3), A.A. Melnichenko (3), B.L. Agranovich (2), E.I. Yakushkina (2), A.A. Novikova (2), A.M. Karmanov (6), I. G. Borisenko (4), G. A. Pollak (8), N. V. Dneprovskaya (5), E. A. Yankovskaya (5), I. V. Shevtsova (5), A.V. Nesterov (7), U. Aripova (13), Yu. F. Telnov (9), R.Isyanov, K,Rustamov (22), N.Rustamova (19, 20, 21, 22), D.Yunusova, I.Ilhamova (19), E.R. Ipatova (9), H. Nakashima (11), H. Aghajan (11), J.C. Augusto (11), A.V.Shiryai (10), T.L. Gerasimenko (12), I.V. Grubin (12), T.M. Gulaya (12), O.N. Zhidkova (12), S A. Romanova (12), L.Y.Akramova (15, 16, 17, 18) and others).

3 Results and Discussion

The concept of smart education is quick adaptation to available resources, maximum variety of multimedia, quick adaptation to the level and level of listener demand. Continuous development of competencies, constant growth and renewal of knowledge are among the urgent tasks of the modern education system. The reason is that the influence of human capital on the development of knowledge is now absent. To solve such problems, it is necessary to radically change not only the educational environment itself, but also the structure, tools and methods of the education system. It is necessary to improve such knowledge as analytical competence, complex problem solving skills, innovative ideas, innovative culture of communication. Because learning based on traditional educational parameters does not prepare people for a smart society. In turn, innovation is impossible without smart technologies. If the formation in this direction lags behind, it will slow down and harden (1).

“Smart” systems, “smart” environments and “smart” industries are the trends of the post-industrial society, the concept of which arose due to the development of technologies that allow solving problems of organizing and managing production and technological processes at a new,

higher intellectual level. This is directly related to such characteristics as digitalization, autonomy, interactivity, remote control, solving complex problems, and so on.

A smart (intelligent) environment is defined as the physical infrastructure that allows the surrounding intelligence to function. (eleven).

Smart environments will not be able to function without the development of “smart” or smart technologies, which become the basic component (basic technologies) for the development of any environment and production, penetrate into all areas of activity, including education. The discussion of SMART in education in world publications has been going on for the last 10 years, in foreign studies even longer, and it allows reflecting new grounds for the transformation of educational systems based on the use of new (information, electronic, smart technologies and resources).

The concept of SMART goals

SMART technology (SMART) is a modern approach to setting working goals. The system for setting smart goals allows at the stage of goal-setting to summarize all available information, establish acceptable terms of work, determine the sufficiency of resources, provide all participants in the process with clear, precise, specific tasks.

SMART is an acronym for: Specific, Measurable, Achievable, Relevant, Time bound. Each letter of the abbreviation SMART denotes a criterion for the effectiveness of the goals set. Let's consider each smart goal criterion in more detail.

Specific. The SMART goal should be specific, which increases the likelihood of achieving it. The concept "Specific" means that when setting a goal, the result that you want to achieve is precisely defined. Answering the following questions will help you formulate a specific goal:

• What result do I want to achieve by achieving the goal and why?

• Who is involved in achieving the goal?

• Are there any restrictions or additional conditions that are necessary to achieve the goal?

• The rule always applies: one goal - one result. If, when setting a goal, it turned out that as a result, it is required to achieve several results, then the goal should be divided into several goals.

Measurable. The SMART goal should be measurable. At the goal setting stage, it is necessary to establish specific criteria for measuring the process of achieving the goal. Answering the following questions will help in setting a measurable goal:

• When will the goal be considered achieved?

• What indicator will indicate that the goal has been achieved?

• What value should this indicator have in order for the goal to be considered achieved?

Achievable or Attainable. SMART goals should be achievable, since the realistic performance of the task affects the motivation of the performer. If the goal is not achievable, the probability of its implementation will tend to 0. The achievability of the goal is determined on the basis of our own experience, considering all available resources and limitations.

Restrictions can be: time resources, investments, labor resources, knowledge and experience of the executor, access to information and resources, the ability to make decisions and the availability of management levers for the executor of the goal.

Relevant. To determine the significance of a goal, it is important to understand what contribution the solution of a specific task will make to the achievement of the company's global strategic objectives. In setting a meaningful goal,

the following question will help: What benefits will the company bring from solving the task? If, when fulfilling the goal as a whole, the company does not receive benefits, such a goal is considered useless and means a waste of the company's resources. Sometimes Relevant is replaced with Realistic.

Time bound. The SMART goal should be limited in time, which means that there should be a final deadline, exceeding which indicates that the goal has not been met. Setting time frames and boundaries for achieving a goal allows you to make the management process controllable. At the same time, the time frame should be determined considering the possibility of achieving the goal within the established time frame.

SMART technologies in education

In the study by N.V. Dneprovskoy, E.A. Yankovskaya, I.V. Shevtsova (5) gives a fairly broad concept of SMART, which allows it to be consolidated in the methodological apparatus of education. “Smart is a property of a system or process that manifests itself in interaction with the environment and endows systems and / or a process with the ability to:

• immediate response to changes in the external environment;
• adaptation to transforming conditions;
• self-development and self-control;
• effective achievement of the result (5).

This interpretation makes the terminology of smart technologies, smart education, smart learning, “smart” schools and “smart” educational environment quite acceptable for use in pedagogical research and practice.

This terminology actually makes it possible to reflect the changes that are taking place today in society and education at the level of the concepts of post-industrialism, a society of knowledge and competence, informatization and digitalization and / or the subsequent stage of social or technological development. Interestingly, there are several logical chains of such changes that underlie the rationale for the use of new smart technologies:

• change in technological paradigms (from the fourth to the fifth and sixth, where smart education using artificial intelligence will prevail (3);
• change of technologies from WEB 2.0 to WEB 3.0 and cloud technologies associated in research with e-learning and distance learning (2, 8);
• change of generations "X - Y - Z", the last of which (generation Z) is distinguished by a natural attitude to the use of smart technologies and electronic media as a means of communication, life support and learning (5).

A.A. Aletdinova and A.A. Melnichenko analyzed approaches to the interpretation of the concept of smart education, identified the following areas:

• SMART as an educational, intellectual environment;
• SMART as a set of educational institutions and faculty (with which it is difficult to agree, rather, it should be considered as a kind of infrastructure of education, in this case, at a university);
• SMART as a new kind, a new approach to education, allowing you to achieve either higher results, or in more effective ways;
• SMART as the development of a person's personality in the context of the formation of new smart competencies (3).

Nowadays it is becoming common to use presentations prepared in Microsoft Power Point or Macromedia Flash software in the classroom using multimedia tools, but at the same time, interactive technologies such as slideshows are entering the field of education. presentations in

the series. Transferring information to students using new interactive equipment (interactive whiteboard - smart whiteboards, interactive display - Sympodium) allows the presenter to create presentations during the lesson. Interactive Smart Whiteboards can be used to write with special markers, display teaching materials, and create written comments on screen images. At the same time, the information recorded on the interactive Smart Board is stored on magnetic media, printed and sent to the absent student's email. The educational material created on the Smart Board during the lecture can be recorded on the built-in video encoder and reused.

Of course, special software has been developed today (Smart Notebook, Bridgit, Synchron Eyes) to make the most of the interactive smart whiteboards. Each of these programs has its own capabilities. For example, Smart Notebook works with texts and objects, stores information, converts written letters into printed ones. Bridgit quickly and easily sends presentations to partners around the world, receiving reviews of their documents. To do this, the teacher highlights important positions in the speech on a common "desktop", and immediately the program appears in real time in the window of all conference participants. Using the Synchronous Eyes software package, the teacher monitors all students, displays and locks student monitors, submits teaching materials, textbooks, tests, and controls the process using an interactive whiteboard.

When working with interactive whiteboards, the attention of all participants is focused, and they very quickly begin to absorb the training materials. As a result, the skill level of each participant increases. The introduction of new educational technologies into education, in turn, ensures the transition of the educational scheme from reproductive to creative form.

Modern smart education has two main goals:

1. Creation of sustainable motivation necessary for students to learn.
2. Search for new forms and tools of learning through creative solutions.

In short, Smart Education is an association of educational institutions and educators who deliver learning across the Internet of Things based on common standards, conventions and technologies.

In the context of constant growth and renewal of knowledge, the continuous development of competencies throughout the entire career becomes the most relevant in the system of modern education.

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

It is necessary to develop competencies such as analytical, complex problem solving skills, innovativeness - the ability to develop new ideas and their implementation, intercultural communication skills. Professor MESI V.P. Tikhomirov very accurately expressed the main position of the development of education today: “The old education system in no way prepares people for work and life in a SMART society. Innovation is impossible without SMART technologies. If the education system lags behind these directions of development, then it becomes a brake ”.

The concept of SMART in education arose after the penetration into our lives of various smart

devices that facilitate the process of professional activity and personal life (smartphone, smart home, smart car - an intelligent car, smartboard - an interactive intelligent electronic board, SMART system for self-diagnosis of a computer hard drive). SMART means increasing the level of intelligence of devices that shape the environment for a particular type of activity. The transfer of this concept to education is at an early stage, the terms and basic concepts are in the process of formation. The understanding of SMART in relation to education ranges from the use of smartphones and other similar devices to deliver knowledge to students to the formation of an integrated intelligent virtual learning environment, including using devices of the SMART category.

The speed of emergence of new technologies in the last decade has grown significantly, each year manufacturers offer new devices for professional activities and communications. New smart SMART technologies require changes in the platforms used for knowledge transfer and widespread use of SMART devices. Vocational education should become one of the fastest growing industries, both in terms of content and in terms of technology and teaching methods. The speed of knowledge and technology renewal should be considered as a criterion for the quality of the education system.

It has become the norm to conduct training sessions using multimedia presentations made in software packages such as Microsoft Power Point or Macromedia Flash. However, along with the usual presentation technologies (Microsoft Power Point, Macromedia Flash), new, so-called interactive technologies are penetrating into the education sphere, which make it possible to get away from the presentation in the form of a slide show.

A new form of presentation using interactive equipment (interactive whiteboards SMART Boards, interactive displays Sympodium) is a presentation created by the speaker during his speech - a presentation created here and now. On SMART Boards interactive whiteboards, you can write with a special marker, demonstrate educational material, and make written comments over the image on the screen. At the same time, everything written on the SMART Board interactive whiteboard is transferred to students, saved on magnetic media, printed, and sent by e-mail to absent students. Lesson material created during a lecture on a SMART Board interactive whiteboard is recorded by a built-in video recorder and can be played back many times.

There are several technologies available to make your whiteboard interactive. One technology is resistive sensor technology, the other is DViT technology from SMART Technologies. It uses special digital video cameras located at the corners of the screen. In addition, with the help of a special attachment, you can turn any plasma panel into an interactive whiteboard.

Of course, special software (SMART Notebook, Bridgit, SynhronEyes) has been created to maximize all the properties of SMART Boards interactive whiteboards. Each of these programs has its own characteristics. SMART Notebook lets you work with text and objects, save information, and turn written text into typed text. The Bridgit program makes it easy and quick to give presentations to partners around the world, get feedback on your document. As soon as you highlight the key positions of your speech on the general desktop, the program immediately displays all your notes in real time on the screens of the rest of the conference participants. With the help of the SynhronEyes software package,

the teacher can monitor what students are doing, display all student monitors on the blackboard, block student monitors, send educational material from the interactive whiteboard, for example, a test, to all computers.

When working on interactive whiteboards, students' concentration improves, learning material is absorbed faster, and as a result, the performance of each student increases.

The introduction of new technologies in the field of education leads to a transition from the old scheme of the reproductive transfer of knowledge to a new, creative form of education. One of the main tasks of modern education is to create sustainable motivation for students to acquire knowledge, the other is to search for new forms and tools for mastering this knowledge with the help of creative solutions.

SMART-technologies in the process of teaching the discipline "Russian language"

This subject differs from many other academic disciplines in that it requires the trainees to have both practical skills and theoretical knowledge. This affects both the hardware and software used in teaching and the pedagogical and methodological methods of teaching the Russian language.

The acquisition of new skills, new "literacy" (technical, critical, linguistic and cultural) plays a very important role in the acceptance, mastery and use of ICTs in language teaching. The successful implementation and application of new technologies is closely related and directly dependent on the training of teachers, and special efforts are required to create training programs for teachers, demonstrate the benefits of using ICT in the educational process, and sometimes overcome resistance to their use. (14)

However, the availability of new technologies does not automatically change the very "culture" of learning, they only provide opportunities for its transformation.

The attitude of teachers to new technologies and the corresponding concepts of their use and organization of training determine whether the desired results will be achieved or not, and whether it is possible to change the very "culture" of learning. (12)

The main reasons for the use of innovative computer technologies by Russian language teachers are:

• being in an authentic language environment;
• access to extensive sources of information and various language options;
• opportunities to communicate with the outside world;
• student-centered approach to learning;
• development of the student's ability to work independently;
• greater variety of educational content;
• new conditions for self-education and the creation of individual learning paths;
• teachers and students can jointly plan and organize the course of study, which allows students to influence the choice of educational content;
• remove the limitations inherent in the traditional method, taking learning and teaching outside the classroom;
• facilitate the communication of students with each other and with the teacher using the Internet.

In order to effectively use ICT in the educational process, a Russian language teacher must have an idea of the individual educational problems of each student, make a deliberate decision when choosing a technology to use, check the reliability of the proposed information content, develop effective search methods and be able to conduct research using a computer, confidently

and competently use standard software, critically evaluate and select the information received.

The variety of media in teaching and learning not only changes the place and quality of teaching, but also affects the learning process from a didactic and methodological point of view, requiring special competencies from teachers. The changes taking place in society as a whole (globalization, computerization, etc.) require new linguistic competencies. Many language skills are now acquired outside university classrooms, often online, and are becoming a powerful socializing factor for students. Therefore, teachers should, first of all:

• improve their pedagogical competencies related to the use of media;

• do not overload students with information and instructions, but advise them more in the learning process;

• rather observe the educational process, rather than direct it; suggest and organize group work. (12)

The active use of materials posted in open educational resources creates new motivation for acquiring knowledge, which, in turn, becomes available to an increasing number of people. Maximum availability of knowledge is the main feature of the new education development strategy - smart education. Smart education is flexible learning in an interactive educational environment using freely available content from around the world. Smart education creates conditions for obtaining the highest possible level of education that meets the opportunities and needs of the modern world, helps students adapt in a rapidly changing environment. It is a student-centered learning system that significantly increases the opportunities for 21st century students, moving from unified to individualized learning, from standard knowledge to diversified knowledge, to teaching that develops creative thinking.

4 Conclusion

Smart education will require the development of online communities, social networks in which teachers can exchange educational content. Smart education will provide an opportunity to move from passive content to active, interactive, online, will create conditions for the synchronized delivery of knowledge, which will ensure the quality of education that will satisfy students. The concept of Smart Education requires the creation of new training courses that should be multimedia, relevant, motivating the student, flexible (adjusted to the level and needs of the listener), integrated, constantly updated.

To optimize the process of teaching the Russian language, various information tools and smart technologies are used, such as webinars, blogs and social networks.

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