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USING ELECTRONIC PLATFORMS FOR EFFECTIVE TEACHING OF THE COURSE «ATOMIC AND NUCLEAR PHYSICS»

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Abstract. The integration of electronic platforms in the teaching process has revolutionized the educational landscape, offering new opportunities to enhance learning experiences. This abstract explores the utilization of electronic platforms for the effective teaching of the course «Atomic and Nuclear Physics». In this digital era, electronic platforms encompass a wide range of tools and technologies, including online modules, interactive simulations, and collaborative forums. In the article reviewed issues of the creation of a unified information system of education improve education teachers through distance learning technology. The types of distance learning technologies and the advantages of their capabilities are also described. It can also be seen that if a number of obstacles arose at the initial stage of mass distance learning, now distance learning has received new opportunities. The place and importance of electronic textbooks in the conditions of distance learning are given. Currently, the main focus is on creating a technical base for the use of new technologies in the teaching of atomic and nuclear physics and improving the methods of teaching atomic and nuclear physics in the training of future teachers. A large number of electronic resources used in the process of teaching atomic and nuclear physics are being developed and implemented in the educational process. In the process of teaching atomic and nuclear physics, computer simulations of physical experiments and pre-demonstration experiments can compensate for the absence of any physical equipment in physical laboratories, or for such shortcomings as their dismissal. Thus, future teachers increase the possibility of self-improvement of physical knowledge of students in schools.

Keywords: Training system, method, technology, innovation, distance learning, education, educational program, elective course, education technology

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«АТОМ ЖӘНЕ ЯДРОЛЫҚ ФИЗИКА» КУРСЫН ТИІМДІ ОҚЫТУ ҮШІН ЭЛЕКТРОНДЫҚ ПЛАТФОРМАЛАРДЫ ҚОЛДАНУ

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Аннотация. Электрондық платформаларды оқу процесіне біріктіру оқу тәжірибесін жақсартуға жаңа мүмкіндіктер ашып, білім беру ландшафтында төңкеріс жасады. Бұл мақала «Атом және ядролық физика» курсын тиімді оқыту үшін электрондық платформаларды пайдалануды зерттейді. Біздің цифрлық дәуірімізде электронды платформалар көптеген құралдар мен технологияларды, соның ішінде онлайн модульдерді, интерактивті тренажерларды және ынтымақтастық форумдарын қамтиды. Мақалада білім берудің біртұтас ақпараттық жүйесі арқылы болашақ мамандарды қашықтықтан оқыту жағдайында даярлау қарастырылады. Сонымен қатар, қашықтан оқыту технологиясының түрлері және олардың мүмкіндіктерінің артықшылықтары баяндалады. Сондай-ақ, жаппай қашықтықтан оқытудың алғашқы кезеңінде бірқатар кедергілер орын алған болса, қазіргі кезде қашықтықтан оқытудың жаңа мүмкіндіктерге қол жеткізгендігін көруге болады. Қашықтан оқыту жағдайында электрондық оқулықтардың алатын орны мен маңызы келтіріледі. Оның ішінде, мақала мазмұнында болашақ физика мұғалімдерін даярлау үшін «Атом және ядролық физика» курсын оқытудағы материалдар келтіріледі. Қазіргі таңда осы мәселелермен байланысты Атом және ядролық физиканы оқытуда жаңа технологияларды пайдаланудың және болашақ мұғалімдерді даярлауда Атом және ядролық физиканы оқытудың әдістемесін жетілдірудің техникалық базасын құруға басты назар аударылып жатыр. Атом және ядролық физиканы оқыту барысында пайдаланылатын электрондық ресурстардың көптеген түрі жасалынып оқу үдерісіне енгізілуде. Атом және ядролық физиканы оқыту үдерісінде физикалық тәжірибелер мен домонстрациялық эксперименттерді компьютерлік модельдеу арқылы біршама физикалық құрал-жабдықтардың физикалық лабораторияларда жоқтығын немесе олардың жұмыстан шығу сияқты кемшіліктердің орнын толтыруға болады. Сол арқылы болашақ мұғалімдер мектептерде оқушылардың физикалық білімдерін өз бетінше жетілдірудің мүмкіндігін арттырады.

Түйін сөздер: Оқыту жүйесі, әдістеме, технология, инновация, қашықтан оқыту, білім беру, білім беру бағдарламасы, элективті курс, білім беру технологиясы

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ИСПОЛЬЗОВАНИЕ ЭЛЕКТРОННЫХ ПЛАТФОРМ ДЛЯ ЭФФЕКТИВНОГО ОБУЧЕНИЯ КУРСУ «АТОМНАЯ И ЯДЕРНАЯ ФИЗИКА»

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Аннотация. Интеграция электронных платформ в учебный процесс произвела революцию в образовательном ландшафте, открыв новые возможности для улучшения опыта обучения. В этой статье исследуется использование электронных платформ для эффективного преподавания курса «Атомная и ядерная физика». В нашу цифровую эпоху электронные платформы включают в себя множество инструментов и технологий, включая онлайн-модули, интерактивные симуляторы и форумы для совместной работы. В статье рассмотрена технология дистанционного обучения в повышени уровня образования педагогов с помощью создания единой информационной системы образования. Также излагаются виды дистанционных технологий обучения и преимущества их возможностей. Также можно увидеть, что если на начальном этапе массового дистанционного обучения возник ряд препятствий, то в настоящее время дистанционное обучение получило новые возможности. Приведены место и значение электронных учебников в условиях дистанционного обучения. В настоящее время основное внимание уделяется созданию технической базы использования новых технологий в преподавании атомной и ядерной физики и совершенствованию методики преподавания атомной и ядерной физики в подготовке будущих учителей. Разрабатывается и внедряется в учебный процесс большое количество электронных ресурсов, используемых в процессе обучения атомной и ядерной физике. В процессе обучения атомной и ядерной физике с помощью компьютерного моделирования физических экспериментов и домонстрирующих экспериментов можно компенсировать отсутствие в физических лабораториях какого-либо физического оборудования, либо такие недостатки, как их увольнение. Тем самым будущие учителя повышают возможность самостоятельного совершенствования физических знаний учащихся в школах.

Ключевые слова: Система обучения, методика, технология, инновация, дистанционное обучение, образование, образовательная программа, элективный курс, технология образования

Introduction

This topic is about making the teaching of «Atomic and Nuclear Physics» better by using electronic platforms:

1) Using Electronic Platforms: This means making use of things like computers, the internet, and other electronic tools.

2) Effective Teaching: This is about teaching in a way that really helps students learn well.

3) Course "Atomic and Nuclear Physics": This is the specific subject we're talking about – the study of atoms and nuclei.

The new principles of the development of the world today require the education system to adapt as much as possible to daily economic, social and cultural changes. The world is currently working towards creating a «knowledge society» and a «knowledge economy». On this large-scale issue, the address of the first president of the Republic of Kazakhstan N. A. Nazarbayev States: «We must continue to continue education. Quality education should become the basis of industrialization and innovative development of Kazakhstan» (Nazarbayev, Tokayev, 2019). Therefore, each teacher who aims to provide his students with a high-quality productive education should focus his experience on the channel of innovation and effectively use different methods.

Currently, the development of information and communication technologies in accordance with modern requirements requires timely changes in the system of assessment and use of knowledge. In this regard, the methods, methods, technologies used in training are updated depending on the educational requirements. Currently, the development of information and communication technologies in accordance with modern requirements requires timely changes in the system of assessment and use of knowledge. In this regard, the methods, methods, technologies used in training are updated depending on the educational requirements. The younger generation, striving to acquire high-quality and deep knowledge, has a sufficient degree of digital literacy, and they use all the possibilities of new technologies in the course of life. The effective use of these opportunities depends on the pedagogical knowledge, skills, and experience of the teacher.

A competitive specialist who strives for professional development is looking for ways to gain new knowledge without losing his main activity. And in connection with the growing requirements for specialists, universities are looking for new forms and methods of training, introducing new technologies into education. One of the new forms of Organization of the educational process is training through distance learning technologies.

Currently, the number of special educational organizations using distance learning technology is growing all over the world. Such types of distance learning provide access to higher pedagogical education, open up a wide range of opportunities for individual individualization of the content of education, and, most importantly, contribute to the speed of learning (Shishov et al., 2015). Of course, this will be possible if all the conditions and conditions of distance learning are observed.

Main part. Online Learning Modules:

Materials: Interactive presentations, digital textbooks, and multimedia resources.

Methods: Designing structured modules that break down complex topics, incorporating visually engaging content such as videos, animations, and interactive simulations.

Virtual Laboratories and Simulations:

Materials: Virtual lab software, simulation tools, and digital experiments.

Methods: Integrating virtual labs into the curriculum, allowing students to perform experiments digitally, manipulate parameters, and observe outcomes in a controlled virtual environment.

Interactive Discussion Forums:

Materials: Online discussion platforms, collaborative tools.

Methods: Creating discussion forums for students to actively participate, share insights, ask questions, and engage in peer-to-peer learning. Encouraging discussions on challenging topics and providing guidance as needed.

Real-time Assessment Tools:

Materials: Online quiz platforms, instant feedback mechanisms.

Methods: Implementing quizzes and assessments with immediate feedback. Using real-time assessment tools to gauge student understanding, identify areas of difficulty, and adapt teaching strategies accordingly.

Accessibility and Flexibility:

Materials: Course materials hosted on a learning management system (LMS), accessible from various devices.

Methods: Ensuring course materials are accessible online, allowing students to learn at their own pace. Providing flexibility in accessing resources from any location with an internet connection.

Collaborative Project Tools:

Materials: Digital collaboration platforms, project management tools.

Methods: Assigning collaborative projects that require students to work together using online tools. Fostering teamwork, communication, and problem-solving skills through virtual collaboration.

Webinars and Virtual Guest Lectures:

Materials: Webinar software, virtual meeting platforms.

Methods: Organizing webinars and virtual guest lectures by experts in the field. Providing opportunities for students to interact with professionals, ask questions, and gain real-world insights.

Online Journal Articles and Research:

Materials: Access to digital libraries, online journals.

Methods: Assigning research projects that involve exploring online resources, accessing digital journals, and staying updated on the latest developments in atomic and nuclear physics.

Research materials and methods

All types of education are characterized by interactivity. Each type of Organization of educational activity or the educational process itself in general is characterized by an interactive level. And the speed of «understanding» of educational material depends on the time allocated by the teacher for consulting, the way of organizing interviews, the technology used for its implementation, and even on the number of students, etc. These tasks should also be solved correctly in the context of distance learning technology. There are a dozen definitions of the concept of» distance learning». Among them are» distance learning - distance learning», an action aimed at organizing special interaction of the student with the teacher using ICT (Information and Communication Technology). It is not constructive, regardless of space, time and specific educational institution, and is implemented in its own

pedagogical system, the purpose, content, means, methods and types of which make up the teacher and the student.

Electronic educational resources allow to increase the effectiveness of training due to the following advantages:

- Activation of students' cognitive activity
- Individual approach to training
- Providing feedback between the teacher and the student
- The possibility of using various forms of training (distance learning, blended learning)

The article provides examples of the use of electronic educational resources in teaching atomic and nuclear physics, as well as the results of the study conducted by the authors, which showed the effectiveness of the use of electronic educational resources in teaching students (Gusev et al., 2019).

The development of the teaching system in accordance with modern requirements was the focus of teachers ' attention. V.P. Bespalko in his works emphasizes the features and advantages of didactic systems and their pedagogical analysis.

The electronic textbook allows you to increase the effectiveness of training due to the following advantages:

- Accessibility and usability
- Possibility of individual work with the material
- The presence of interactive elements that contribute to the assimilation of the material
- The possibility of organizing feedback between the teacher and the student

The article provides examples of the use of an electronic textbook in teaching atomic and nuclear physics, as well as the results of a study conducted by the authors, which showed the effectiveness of using an electronic textbook in teaching students (Ilina et al., 2020).

According to research, it can be seen that the components of the advanced didactic system form the trinity, which are:

- student (schoolboy, schoolgirl, student);
- information and communication technologies;
- pedagog (schoolteacher, teacher).

The implementation of the effective functioning of this system-forming Trinity will be fully meaningful from the point of view of a systematic pedestal.

Currently, it is known that distance learning depends not only on the development and functioning of ICT, but also on the training of students and teachers. In the educational system, the result of traditional learning directly depends on the training of the student and teacher participating in the pedagogical system (I. P. Podlasyy), in the conditions of distance learning, as mentioned above, the Trinity depends on the ability of the components of the didactic system to fully work.

It is quite natural that the distance learning system at school and distance learning at Higher School are interconnected and undergo changes in terms of consistency. This is due to the fact that the future teacher should be prepared for the distance learning system at school in the conditions of high school. In addition, changes in school are a prerequisite for changes in higher education.

A number of research methods were used in identifying and determining the

state of the distance learning system and improving it: theoretical research methods, including scientific and pedagogical and analysis of its results, studying the experience of distance learning and its formation. In determining this issue, the works of well-known teachers-scientists were studied, the content of educational and methodological works of methodologists of a scientific and methodological nature was analyzed. Scientific articles on the best practices of general education and higher schools in distance learning were studied and the course of the formation of best practices was studied. Conducting empirical research methods, questionnaires, and interviews allows us to fully identify positive and negative actions in remote learning. Based on the use of research methods, the educational and methodological activities of teachers of higher schools on distance learning were monitored. As a result, the content of educational work on distance learning was determined. Future teachers were interviewed and interviewed about the process and results of teaching in the context of distance learning. The opinions of future teachers on the results of training in the conditions of traditional and distance learning were evaluated and summarized.

Results

Currently, there are different types of distance education technologies in the country that are used at different levels. In the context of quarantine restrictions that have occurred in connection with the worldwide Covid-19 pandemic, educational institutions have demanded the widespread use of these types of distance learning. Among distance learning technologies, the future of internet technology is wide and widely used. «For teachers and students, the internet is a collection of computer systems that provide a wide range of information, educational and communication services» (Andreev et al., 2017). In the conditions of quarantine, various educational institutions use the most optimal actions and wide opportunities in the forms of training.

Distance learning is one of the forms of the system of continuing education, which implements a person's rights to education and information. It allows you to increase the knowledge and skills of students based on the main activities of specialists.

Thus, distance learning is a form of training that takes place between the teacher and the student at some distance, accompanied by internet resources, that is, training at a certain distance with the help of internet networks.

There are 3 different forms of organizing distance learning: online (synchronous) and offline (asynchronous), and the third most common type is webinar.

Online training is a form of Organization of training by viewing the teacher's screen at a certain distance at the current time with the help of internet resources.

Offline learning is a form of learning that allows you to exchange information between a teacher and a student using internet resources (e-mail).

A webinar is a form of conducting seminars and trainings using the internet.

The local system of Distance Learning operates within the framework of a specific education and a separate City (University), which includes not only universities, but also schools, gymnasiums and colleges. At the initial stage of working within the framework of such a system, it is necessary to successfully implement the principles of continuing education with the rational use of intellectual potential, computer equipment. In this regard, schools and universities should use the local and regional network to distribute their creative work and exchange experience in teaching methods (Akshalova et al., 2016).

The distance learning form can be implemented on three main technologies: The distance learning form can be implemented on three main technologies:

- network technology (autonomous network courses or virtual departments, universities using the Internet);
- distance learning based on case technologies;
- Distance learning based on TV technologies.

At the same time, it should be able to work with new information technologies for effective learning.

Thus, distance learning as one of the forms of the system of continuing education, which implements a person's rights to education and information, allows you to increase the knowledge and skills of specialists while performing their main functions. An important stage in the organization of distance learning is virtual (synchronous or asynchronous) interaction. Synchronous interaction considers the relationship between the student and the teacher in real time. Distance learning system chats or video conferences can be used for this. Asynchronous interaction is carried out in the event that the student and the teacher are not in communication in real time, in this case, contacts in distance learning are organized by correspondence by e-mail with the help of mailing lists or teleconferences.

An effective structure for the development of information and telecommunication technologies in the education system is educational portals. The main task of the portal is supplemented by important functions that contribute to the development of a unified educational informatization environment through the support of the high-tech educational process. The educational and technological policy of the portal, as well as its educational activities, is a method of gradual introduction of the informatization process into the methodological and technological channel.

According to research, the wave of developing digital technologies will subsequently penetrate the school. The process of change in it is seen as a digital renewal of the school in an evolving digital environment (schools' Digital Renewal Process - SDRP). Digital update is systematic (multidimensional) in nature. It includes changes in the educational environment (physical, digital), in the educational process and in the organization of school work. The process of digital renewal is unevenly distributed at different stages of private schools. One-time monitoring of the progress of a digital update allows you to correct its current state (statics). The control sequence allows you to see changes in the state of schools in the course of their digital modernization (kinematics). The relationship of controlled changes with any impact on the education system as a whole allows us to discuss the development of digital updating under the influence of external influences (dynamics). The stages of the introduction of digital technologies into the school-computerization, early and late informatization, digital transformation (transition to a»smart school») - are considered as the stage of maturity of the digital modernization of education in general. A conceptual framework is considered that can be used to describe the digital modernization of the school and assess its improvement (Uvarov et al., 2021).

These changes and their implementation require future teachers in special training. The first of them is the training of the future teacher in ICT, the second is the subject (or academic) training and the third is the methodological training. In higher educational institutions, the training of future teachers in ICT is provided by a special discipline and elective subjects. Subject training is carried out on distance learning.

The educational organization provides students with scientific and methodological assistance through the interaction of participants in the educational process with the use of telecommunications tools, taking into account the capabilities of students. In the period

between sessions, the distance learning form offers students to independently study theoretical material and receive distance consultations from tutors. The student's independent work includes the work done by him with an electronic educational and methodological complex and additional materials. Independent work of students, conducted under the guidance of a teacher-tutor, includes interactive consultations on the materials of all academic disciplines (via chat, forum) (Collection of scientific articles of the IV International Forum on informatization of education in Kazakhstan: 119). These issues will be aimed at the full implementation of the subject training of future teachers.

Discussion

So, as the main tasks of organizing the educational process using distance learning technologies, the following can be noted:

- personalization of training;
- improving the effectiveness (quality) of training;
- provision of educational services for persons for whom the traditional form of training is unacceptable.

In fact, training is currently being individualized. A number of works are being done to improve the quality of training. The content of the educational and methodological complexes of the discipline is being improved, the possibilities of training in accordance with the development of ICT are also expanding.

For the organization and proper functioning of the distance learning system in educational organizations, it is necessary to perform the following functions:

- support for training courses;
- delivery of educational materials to students;
- give advice;
- Organization of feedback with students;
- control of students ' knowledge.

In order for our speech to be justified, we can mention the work being done in the framework of the training of future physics teachers at the International Kazakh-Turkish university named after Khoja Ahmed Yasawi. In the modern school physics course, the topics «Atomic and nuclear physics» are included in the physics course. Therefore, the course «Atomic and nuclear physics» is taught at the university as an optional component. For the implementation of its distance learning, a number of works (among other disciplines) have been developed. Including:

- The educational and methodological complex of the discipline for the course «atomic and nuclear physics» is developed and uploaded to the database of the information and resource center of the University with distance educational opportunities for students to be available (https://portal.ayu.edu.kz/HAYU-WEB/faces/_page/_ogrisleri/ders/ders_Container.xhtml, https://tng.ayu.edu.kz/);

- students of the specialty (by registration) have downloaded educational materials (lectures, seminars) on the subject and see training in accordance with it;

- distance learning process (https://portal.ayu.edu.kz/, MOODLE, PLATONUS, ZOOM, Google, Yandex, mail.ru YOUTUBE and the national open education platform Kazakhstan) with feedback (in most cases, lectures and seminars are conducted on the platform ZOOM);

- control of students ' current knowledge is carried out orally (ZOOM) and in writing (by students https://portal.ayu.edu.kz (https://tng.ayu.edu.kz), and is included in

the PLATONUS (УЕ-IKTU-027-2022, 2022).

Today, the progress of any socio-economic sphere is impossible without the emphasis on the information support system, the introduction of Information Technologies of education, namely, electronic textbooks and Video Films, and other electronic publications through a satellite channel of distance learning (Akhmetova et al., 2013). It should be noted that in the context of distance learning, electronic textbooks play a special role.

The technology of creating electronic textbooks is based on the laws of the learning process and, according to the study, consists of four interrelated parts: motivational-target, content, operational and evaluation-performance.

The motivational-target part of the electronic textbook consists in the compilation of modules and small modules. The module is a set of system and service knowledge in the subject areas. It is the «service node» of the organization of training through an electronic textbook.

The content part of the electronic textbook is implemented through hypertext. It is an information learning environment as a set of data. It is selected from the point of view of the author who creates an electronic textbook that meets the requirements of the mandatory level of Education. Hypertexts are complemented by videos on the same subject area. The text sounds in Kazakh, Russian and some books in English.

The operational part of the electronic textbook is based on the implementation of tasks in interactive mode. The implementation of this method largely depends on the level of preparation of the pedagogical problem in the teaching methodology and, moreover, on the methodology of distance learning. At the same time, the electronic textbook on the course «Atomic and nuclear physics», prepared by US, has a beneficial effect on improving the quality of teaching and the quality of Education.

Finally, it can be seen that distance learning technology provides the possibility of creating a learning system that lives in the middle of Education. In this system, the teacher takes into account the work, personal interests and requests of the student. Given that the student lives in the middle of the education system, the training system as a whole changes. The teacher is engaged in the organization of independent work for the student. The use of distance learning technology also increases and changes the role of the teacher. Some teachers take the position that correspondence and distance learning should not be mixed. Their main feature is that in distance learning, the regularity and effectiveness of interventionism is ensured. Distance learning uses materials taught full-time (https://articlekz.com/kk/article/23533, 2015).

In turn, the distance learning approach imposes several requirements on teachers and other persons interested in this matter: the teacher has a high degree of competent work with the computer; knowledge of the goals and objectives of distance learning, its further development on the basis of Information Technology and communication tools; knowledge of distance learning technology, knowledge of employees, students; it is necessary to prepare comprehensively for conducting the educational process within the framework of distance learning, to be a coordinator in the process of conducting classes on the distance learning system, and so on.

Interviews were conducted with students on distance learning. Analyzing students answers to questions, you can group the answers as follows, including those noted as advantages: Interviews were conducted with students on distance learning. Analyzing students ‘ answers to questions, you can group the answers as follows, including those

noted as advantages:

- distance learning is more effective than traditional training (reduces time costs, financial costs, idling);
- it is optimal to organize pedagogical communication with the teacher and students;
- availability of the opportunity to determine the terms of the meeting on academic work in agreement.

Students note the shortcomings in the conditions of distance learning:

- incorrect communication negatively affects the learning process and result;
- lack of access to libraries where the paper version of textbooks and teaching aids is stored (due to remote location);
- lack of opportunity to master pedagogical skills in the subject area;
- lack of opportunity to participate in student and social events;
- the presence of a computer or other ICT tools for a long time.

Students noted the possibility of dual training in the conditions of distance learning for pedagogical specialties (Gozman et al., 2015).

Conclusion

For the implementation of distance learning of the course «Atomic and nuclear physics» in the training of future teachers, it is necessary to prepare a number of documents, including the educational and methodological complex of this discipline and ensure their availability for teachers and students.

The structure of the educational and methodological complex of the discipline or the content of the discipline in the conditions of distance learning is as follows, and they can be different according to the procedure established by the higher educational institution.

1. Standard curriculum of the discipline (if the discipline is from a mandatory component or in its absence, the curriculum of the discipline);
2. Subject training program for the student (Syllabus);
3. Map of educational and methodological support of the discipline;
4. Lecture complex (lecture thesis, illustrative and broadcast materials; list of used literature), including the presence of video lectures, presentations;
5. Plan of practical and seminar classes and training materials for students;
6. Methodological guidelines for the organization of educational work and teaching technologies in the conditions of distance learning;
7. Methodological guidelines for course projects (works) ;
8. Materials on independent work of the student (independent work of the student under the guidance of the teacher) and instructions for its organization;
9. Materials on monitoring and evaluating students ‘ academic achievements (written control tasks, test tasks, a list of questions for independent training, exam tickets, etc.) and much more.

The presence (or condensed form) of materials in this chain and their availability to students is the basis for training at the level of training in the course of the discipline.

In the content of the disciplines of the methodology of teaching the discipline on the methodological training of future teachers (for example, «methods of teaching physics», etc.), special topics are considered, such as «Organization of distance learning at school». It provides training for future teachers for distance learning of students at the school.

The main task of the teacher for the implementation of the course «Atomic and nuclear physics» in a higher educational institution in the conditions of distance learning:

- management of educational work and independent work performed by the student in the discipline;
- consideration of emerging issues related to learning;
- setting goals and objectives of training and joint implementation of the search for ways to solve them;
- formation of knowledge and necessary experience skills;
- implementation of educational work Organization activities;
- Organization of interaction and feedback between students;
- control and evaluation in the educational process.

The basis of the educational process during distance learning of students in the specialty is independent work at a convenient time, in a convenient place, at an effective pace. Therefore, students need to master the techniques and methods of independent work, the basics of independent replenishment of knowledge at the highest level. At the same time, it should be able to work with new information technology tools for effective learning.

Thus, distance learning is one of the forms of the system of continuing education, which implements a person's rights to education and information transfer, while performing the main function of specialists, allows them to form their knowledge and skills in the training of future specialists in accordance with the direction of training.

In conclusion, the effective use of electronic platforms in teaching «Atomic and Nuclear Physics» transcends traditional boundaries, fostering an environment where education becomes dynamic, interactive, and tailored to the needs of modern learners. As we navigate this digital landscape, continuous exploration, adaptation, and innovation will play pivotal roles in shaping the future of education in the realm of atomic and nuclear physics.

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