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S.E. Abdugalina, M.Y. Baidalina, Z. Zh. Iskakova

Kazakh University of economics, finance and international trade
sairan@mail.ru, merei@mail.ru, zarina@mail.ru

THE INTRODUCTION OF INNOVATIVE TECHNOLOGIES IN THE EDUCATIONAL PROCESS OF HIGHER EDUCATION

Abstract. The most important strategy of the overall national development of Kazakhstan is the modernization of higher education, the purpose of which is to create innovative conditions for students in educational institutions of the country. The transition to a multi-level system of training, improving the competitiveness of educational institutions of higher professional education, the introduction of telecommunications systems and the widespread use of information networks of the Internet allows for a qualitatively new level of training for future specialists ready for innovative technological solutions, creative thinking and tasks in the field of research activities. To improve the quality of the educational process and the effectiveness of the management of the educational process, it is necessary that the organization of informatization covers all the main activities of the institution.

INTRODUCTION

Informatization refers to the process of creating optimal conditions for satisfying needs, i.e. students in higher education, on the basis of the formation and use of information resources for the organization of training, education and self-education. Informatization of the educational and educational process requires: - the organization and development of an automated information management system; - The introduction of information and innovative technologies in the learning process. Currently, one of the main tasks of higher education is to prepare competitive, highly qualified personnel to perform professional tasks. Educational institutions in the country are improving the quality of education, scientific and methodological work, introducing information technology training, actively interacting with customers. To improve the quality of education, the development and introduction of innovative technologies in the learning process is becoming increasingly important, which ensures the effectiveness of learning through the visualization of the material being taught, the development of skills for students in working with modern computer equipment, etc. However, the introduction of information technologies allows you to significantly improve the efficiency and quality of the organization of training, to carry out continuous monitoring of classes, ensure monitoring current and residual knowledge of students.

MAIN PART

Modern innovative technologies in education have demanded a radical restructuring of the educational process in higher education. Visualization of the material allows you to improve the efficiency of educational and scientific activities, with less time spent to master the volume of material defined by the curriculum. In this regard, lecture halls and some classes are permanently equipped with presentation tools — a personal computer, a screen, a speaker system, an interactive whiteboard, etc. The equipment should always be in the classrooms, which will simplify the introduction of new educational technologies in the educational process of the university. [1] The most important direction of the introduction of innovative methods is the creation of conditions conducive to the formation and development of abilities in students to research activities: - targeted, concerted actions (interaction) of the scientific and teaching staff of the university with the leadership of the research department; - increasing the responsibility of students for their actions; - the interaction of teachers with each other (conversations, exchange of experience); - possession of traditional methods of teaching and education in higher education; - availability of resources and a clear system for the implementation of innovative methods (specialists in

the professional field, time resource, educational and methodological base, etc.); - development of methods to assess the effect of the introduction of innovative methods; - high development from the intellectual and cultural level of the teacher; - the willingness of students to perception of specific innovative methods of education; - professional and moral readiness of the teacher to introduce innovative methods of education in creative groups. Attracting students to work in creative groups under the guidance of a teacher is one of the effective forms of preparing students for professional activities of an innovative orientation. The organization of creative groups requires a special approach: - At the beginning of the formation of a creative group, there are many who want to be its participants, but over time there are screenings for various reasons: the work the group is working on is not interesting, organization and self-discipline are not formed for the synchronous work of its participants. Thus, the leaders of creative teams and their teams need to: - propose a wide range of problems and areas of work of creative teams, taking into account the diversity of interests of each student-researcher; - for the annual replenishment of creative groups, it is necessary to organize students, starting from the first courses of study, attracting them to organizing events and developing their personal qualities that are necessary for further research work; - differentiated approach to the leadership of students' research, taking into account the psychological work of each to form a positive moral and psychological climate in the working group, an environment of psychological compatibility and harmony; - to motivate senior students to research creative activity in groups to count this work as a training and production pre-diploma practice, and also to create conditions for them to participate in psychological and pedagogical competitions, scientific and practical conferences, competitions that require organizational and material costs at the expense of the university; - to encourage teachers to create creative groups for the study of scientific problems. [1] Thus, the innovation orientation of an educational institution is a certain set of innovation subjects (team members who are ready for the innovative development path of a higher education institution). Pedagogical innovation has become more actively used. The readiness of educational institutions for innovative development acts as a willingness to perceive, produce, assimilate and disseminate innovations, the ability of management structures to engage the teaching and learning staff on the path of innovation.

New requirements of society to the level of education and personal development lead to the need to change learning technologies. Today, technologies are productive, allowing to organize the educational process taking into account the professional orientation of the training, as well as the orientation on the personality of the student, his interests, inclinations and abilities [2].

By learning technology is meant a certain way of learning, in which the main load on the implementation of the function is performed by the training means under the control of the person. In technology of teaching, the leading role is assigned to the means of teaching: the teacher does not teach students, but performs the functions of stimulating and coordinating their activities, as well as the function of managing the means of teaching. The pedagogical mastery of the teacher consists in selecting the necessary content, applying the best methods and means of teaching in accordance with the program and the set pedagogical tasks.

Method is a way to advance to the truth. The success of training depends mainly on the orientation and internal activity of the trainees, the nature of their activities, the degree of independence, the manifestation of creative abilities and should serve as an important criterion for choosing a method. There are 5 teaching methods:

- Explanatory - illustrative method.
- Reproductive method.
- Problem presentation method.
- Partially - search, or heuristic method.
- Research method.

The main forms and methods of teaching that improve the quality of education are: role-playing games, business games, seminars, repeating and summarizing lessons, conferences, debates, dialogues, problem-based learning, independent work, defending abstracts, individual work, creative essays, reports, messages; testing, programmed control, research work and many others. All the listed learning technologies contribute to solving the problem of learning quality.

Analyzing the modern practice of conducting lectures [2], we can formulate a number of didactic problems that need to be solved. So, one of them is a significant amount of information presented to

students in combination with an insufficient level of its structuredness, which complicates perception. The teacher's use of mainly one perception channel does not provide adequate learning of the educational material - the bulk of information must be understood by the student "by ear" (which also creates another difficulty - inaccuracy and unclear design of the abstract notes). The form of presenting information in a lecture lesson, as a rule, is static and cannot flexibly adapt to changes in the content of education. As for the trainees themselves - the conservative form of lectures does not contribute to their vigorous activity, which does not contribute to the formation of the students' subjective position in relation to the didactic process. These problems are particularly relevant for the teaching of special technical disciplines.

Correction of these shortcomings can be carried out through a variety of didactic innovations - using the method of problem-based learning, case study, the method of working in small groups, computer modeling and practical analysis of the results, interactive lectures, the use of test items as a control component of lectures, and inclusion in the educational The process of new forms of presentation of educational material. Practice shows that the most effective, in this context, is the use of electronic presentations that structure the content of the lecture in accordance with the logic of its presentation.

The student's emotional state largely determines mental and physical performance. The high emotional tone of the audience and its involvement in the educational process ensures the implementation of the disclosure of the reserves of the student's personality. If there is no psychological comfort in the lesson, then other incentives for learning and cognitive activity are paralyzed, the main value of the relationship between the teacher and the students is their cooperation, which involves a joint search, joint analysis of success and miscalculations. In this case, the student becomes an initiative partner.

The training of highly qualified specialists with fundamental and applied knowledge, who are able to successfully master new, professional and managerial areas, respond flexibly and dynamically to changing socio-economic conditions, possessing high moral and civic qualities at the present stage is impossible without innovative educational technologies related to improving efficiency learning and aiming at the end result of the educational process.

The use of new and new information tools leads to the emergence in pedagogy of a number of new concepts. The conceptual apparatus for the informatization of education is more widely disclosed in the work of G.K. Selevko [4].

Information technologies are a combination of systematic and mass ways and methods of processing information in all types of human activity created by applied computer science using modern means of communication, printing, computing equipment and software.

Computer technology training is the process of preparing and transmitting information to the student, the main means of implementation of which is a computer.

Information educational technologies call all technologies in the field of education using special information technical means of education (computer, audio, film, video) to achieve pedagogical goals [5, p.18].

In this regard, to clarify the conceptual apparatus, the author has developed a working definition of the concept of "information technical training aids".

Information technical training tools are understood as teaching tools based on personal computers with their software, supplemented with various multimedia, peripheral and auxiliary facilities.

It should be noted that multimedia provides a transition from a rigidly fixed text, characteristic of classical written culture, to a "soft" one - on the screen. Instant readiness of multimedia text for transformation literally pushes the learner to dialogue with him, as a result of which information is perceived at once by several senses in combination with fast access and interactive possibilities of working with it. This gives great opportunities for the development of a special, "visual thinking" that plays an independent role in the development and functioning of a person.

The term information technical training tool includes two concepts: a technical device (for example, a computer, a multimedia projector, a DVD player) and the training tool itself (presentations, video films, respectively). The main thing here, of course, is a learning tool - a carrier of educational information, it is also a means of stimulating the cognitive activity of trainees. With this approach, it becomes clear that the training tools that require the use of appropriate technical devices form part of the arsenal of training materials. They can be used in two ways.

First, to supplement the traditional teaching aids, established on the basis of a rich teaching practice, with technical means as auxiliary. This approach is most common. He, of course, allows us to rationalize the method of teaching, but only slightly. On this basis, it is sometimes an erroneous conclusion that the existing methodology, based on the usual teaching aids, is close to optimal, and, consequently, the cost of introducing innovations will not justify itself.

Secondly, to consider technical training tools in the general range of all possible means, distribute the content of training across a set of interrelated and interdependent means and form in this way sets of training tools in accordance with the capabilities of each of the tools to adequately reflect the phenomenon being studied and solve assigned didactic (training) tasks. This is a qualitatively different in comparison with the first approach to the use of technical means of training. It leads to radical changes in the education system of any discipline, opening the opportunity for optimizing the methods and forms of education, allows you to make the learning process active and manageable, to shift the focus from information training to creative learning that requires thinking.

In the light of the instructions of the President, the Ministry of Culture developed and submitted to the people of Kazakhstan a draft State Program on the Functioning and Development of Languages for 2011–2020.

The program has 4 goals for its implementation.:

1. The state language is the main factor in the unity of nations;
2. Expansion of the sphere of use of the state language;
3. Developed language culture - the main force of the intellectual nation;
4. Development of linguistic capital of the people of Kazakhstan.

The Program provides ways to solve these goals, target indicators and indicators for their implementation.

The draft State Program specifies the need to form the public demand for a language, the problem of language development, the creation of a linguistic social environment, the preparation of methods for quality education and their implementation.

The countries of the world want the freedom of every individual in vocational training to become united for all states. Directions in solving problems of education in the country are determined on the basis of the program documentation of the Bologna process and UNESCO. Our state, in raising the quality of higher education, does not rely on separate work, but supports work in the framework of world leading ideas. At the same time, the significance of Kazakhstan's entry into the Bologna process, other projects "should be understood as a substitute for educational paradigms in order to improve the quality and competitiveness" [6].

CONCLUSION

The set of teaching aids cannot be viewed outside the close relationship with the scientific content of the course, the methods and forms of training. The development of a set of tools for teaching an academic discipline is one of the main tasks of the science of teaching a subject, a private teaching method. Being the material basis of the teaching and learning processes, the toolkit serves as a link between the scientific content of the academic discipline and the didactic system of teaching the subject [7].

There are significant differences in the use of personal computers and information technology in education, which are explained by the orientation towards specific theories of learning and the mastering of knowledge, as varieties of the cognitive process developed in philosophy, psychology, pedagogy and other sciences. At the same time, according to E.S. Mashbitsa, none of the domestic theories of learning did not become the basis for the development of training computer programs [8]. The reasons indicate the impossibility of their technologization, which is a prerequisite, their development is irrelevant to the peculiarities of computer training, one-sidedness is manifested in the description of pedagogical interaction.

To ensure the quality of the educational process, teachers must be specialists in their field, meet the general requirements for teachers, complete basic training, develop their own original methodology and use it in the learning process [9].

Modern media and mass communications cannot replace a lecture, but it should become even more flexible, differentiated, taking into account the particular discipline, the audience specificity, and the psychological laws of cognition, processing what was heard, its impact on the formation of assessments, attitudes, attitudes, feelings and human beliefs, and the capabilities of information technology [10].

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С.Е. Абдугалина, М.Е. Байдалина, З.Ж. Искакова

Казахский университет экономики, финансов и международной торговли

ВНЕДРЕНИЕ ИННОВАЦИОННЫХ ТЕХНОЛОГИЙ В ОБРАЗОВАТЕЛЬНЫЙ ПРОЦЕСС ВЫСШЕЙ ШКОЛЫ

Аннотация. Важнейшей стратегией общего национального развития Казахстана является модернизация высшей школы, цель которой – создание инновационных условий обучения студентов в образовательных учреждениях страны. Переход на многоуровневую систему подготовки кадров, повышение уровня конкурентоспособности образовательных учреждений высшего профессионального образования, внедрение телекоммуникационных систем и широкое использование информационных сетей Интернет позволяет обеспечить качественно новый уровень подготовки будущих специалистов, готовых к инновационным технологическим решениям, творческому мышлению и выполнению задач в области научно-исследовательской деятельности. Для повышения качества образовательного процесса и эффективности управления образовательным процессом, необходимо, чтобы организация информатизации охватывала все основные направления деятельности учреждения.

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С.Е. Абдугалина, М.Е. Байдалина, З.Ж. Искакова

Қазақ экономика, қаржы және халықаралық сауда университеті

ЖОҒАРҒЫ БІЛІМ БЕРУ ҮРДІСІНЕ ИННОВАЦИЯЛЫҚ ТЕХНОЛГИЯЛАРДЫ ЕНГІЗУ

Аннотация. Қазақстанның жалпы ұлттық дамуының маңызды стратегиясы жоғары оқу орындарын жаңғырту болып табылады, оның мақсаты еліміздің оқу орындарында оқушыларды тәрбиелеу үшін инновациялық жағдай жасау болып табылады. Жоғары кәсіби білім берудің білім беру мекемелерінің бәсекеге қабілеттілігін жоғарылату, телекоммуникациялық жүйелерді енгізу және интернеттің ақпараттық желілерін кеңінен қолдану, инновациялық технологиялық шешімдерге, шығармашылық ойлауға және зерттеулер саласындағы дайындыққа дайын болашақ мамандар үшін сапалы жаңа деңгейге өтуге мүмкіндік береді. әрекеттер. Оқу үрдісінің сапасын және оқу үдерісін басқарудың тиімділігін арттыру үшін ақпараттандыруды ұйымдастыру мекеменің барлық негізгі қызметін қамтиды.

Information about authors:

Abdullina Sairan Erdenova - candidate of pedagogical Sciences, acting associate Professor Kazakh University of Economics, Finance and international trade https://orcid.org/0000-0002-0514-5570;

Vidalina Merey Isaevna - master of natural Sciences, senior lecturer Kazakh University of Economics, Finance and international trade https://orcid.org/0000-0002-0164-1892;

Iskakova Sorina Jantina master of pedagogical Sciences, senior lecturer Kazakh University of Economics, Finance and international trade https://orcid.org/0000-0003-4763-4986.