The Theory of the Use of Cloud Technologies in the Implementation of Hierarchical Preparation of Engineers

Ergashev Nuriddin G'ayratovich

Docent of the Karshi Engineering Economic Institute; phone: +99899-098-01-00; nuriddinergashev1986@gmail.com.

ABSTRACT

The article analyzes the importance of using bilutleie technologies in the implementation of hierarchical preparation of Engineers. It has been studied that cloud technology in education can provide access to a wider range of forms and methods of teaching, as well as one of the modern methods of intensification and optimization of the learning process.

Keywords: Cloud Technology, Education System, New Educational Technology.

Introduction. A necessary condition for the formation of an innovative economy of any state is the creation of a system of constant updating of knowledge and competence of these employees. The introduction of modern science-based technologies into the economy establishes high requirements for the qualification, responsibility of employees, readiness to study new approaches to professional activity [1].

Reference analysis (Literature Review). The theoretical and practical problems of continuing education are very important to any civilized state. A number of researchers, including R.Nurutdinov, noted that "the country can go along the path of progress and prosperity, only if all its inhabitants have sufficient knowledge, if without exception, everyone has the opportunity to self-development, to disclose their own income and abilities. Therefore, it is time to implement a very broad approach based on the idea of continuous education as the most extensive social process, which requires a radical restructuring of all directions of public education. It is necessary to revise the objectives and functions of education as a system, the functions of its individual stages. The traditional concept of" human and social role of education, its role as a social institution in the life of every person and society " [3] needs to be revised.

Research Methodology. The modern stage of socio-economic development of civilized countries is characterized by the transition of countries to cloud technologies as well as digital society. Its main content is the formation and development of the digital economy. This leads to the transformation of the entire system of production and service delivery on the basis of the use of information and communication technologies. Changes in the economy have led to global changes in socio-political and other spheres of life of modern society. This was reflected in the development and adoption of a number of normative-legal documents that set out the state policy of developed countries in the field of Education.

The implementation of a public policy that would ensure the development of education in cloud technologies required a

significant structural and meaningful transformation of the local education system. In particular, innovative processes in the field of Education have increased the relevance of solving the problem of training pedagogical personnel in the conditions of developing cloud technology environment. It is worth noting that the mentioned cases actually allow not only to the complexity of pedagogical activity, but also to get acquainted with the new technical and technological supply, which implies the mandatory use of computers and other technologies in a new type, in new organizational and pedagogical conditions. At the same time, the development of cloud technologies is not provided by adequate scientific research in the field of pedagogical personnel training at different levels[4].

In the system of continuous pedagogical education, the issues of organizing and studying the content of training both future and current teachers for work in New conditions of Education have not been studied.

At the same time, issues related to the organization and training of pedagogical personnel with the help of cloud technologies do not require practical oriented work, which is distributed separately.

Analysis and results. Hierarchical training of Engineers for professional activities with the help of cloud technology in our work is understood the system of the level of pedagogical personnel training at all levels of continuous pedagogical education, which ensures the theoretical, practical and personal readiness of the teacher for the implementation of cloud technology. This includes the modern level of Education (Bachelor's, master's, graduate, additional vocational education). However, its peculiarities are the implementation of the educational process using electronic information and educational media, the use of active and interactive methods of Education, which are distributed over time, beyond the clear boundaries of the training room and are not limited to the scope of the table in the traditional sense, and independent work, organized in a certain way. The conduct of such a study is concerned with the need for an answer to modern problems and determines its practical significance.

If we look at the cloud technology itself — it's data processing technologies, in which computer resources are presented to the Internet user as an online service. Here, the" cloud " macro is used as a metaphor for a complex infrastructure that hides all the technical details. Currently, cloud technologies are divided into the following categories: — private (private) — public — hybrid — clan (community) Private Cloud: Private Cloud (English privatecloud) — this is the infrastructure used by one organization, which includes several consumers. The private cloud can be owned, managed by the organization itself or by a third party (or a combination thereof). Public cloud: public cloud (English publiccloud) is an infrastructure that is widely used by the general public. The public cloud can be owned, managed and analyzed to commercial, academic and government organizations (or any combination thereof). Hybrid cloud: hybrid cloud (eng. hybridcloud) is a combination of two or more different cloud infrastructures (private, public or public) that remain unique objects, but are standardized for the transfer of data and applications, or interacting with proprietary technologies (for example, short-term), using common cloud resources to balance the load between the clouds. Clan cloud or public cloud: Community Cloud is a type of infrastructure that is designed to be used by a specific community of consumers (clan) of organizations with common tasks. The public cloud can be co-owned, managed by one or more public organizations or third parties (or a combination thereof), and it can exist both physically and externally in the jurisdiction of its owner. Thus, cloud technologies are data processing technologies in which computer resources are provided to the Internet user as an online service[1] .

Today, it is faced with the need to revise and reform the educational system. That is, in the process of Education, a modern person does not need to accumulate knowledge and skills, but must independently, together with other people, set meaningful goals, create self-education situations, have the means izlash and the ability to produce, these are the methods of solving problems.

As an example of the use of cloud technology in education, we can say the following: electronic diaries, journals; personal accounts for students and teachers;

Interactive reception: thematic forums where students can exchange information; search for information in the absence of a teacher or under his leadership where students can solve specific learning problems; cloud-based data storage.

The directions of the use of cloud technologies in educational activities are as follows:

1. Cooperation of employees on documents. For example, an educational program or an annual plan. This document is drawn up by the staff of the administration and teachers responsible for any field, for example, an educational psychologist, a social teacher or responsible for health care. Everyone is responsible for their own part of the document and can not make changes to other blocks. In order to collaborate on cloud technologies, you'll need to create or put documents in the cloud storage and provide access to those who have a link or email address to it.

2. Joint project work of students. Students receive topics for projects. Then they are divided into 2 groups. Each group will have its own tasks, bunda manager creates a document and gives access. These can be links or Email addresses. Students work on the project at home or at school, fill out the documents with content, when the work is finished, the teacher is given access. If necessary, the teacher will be able to leave comments so that the students can make corrections. For example, using Google Docs, its main advantage is the ability to edit documents (texts, photos, presentations, tables) together.

3. Distance learning. The teacher offers homework to students using electronic diary. For example, in written assignments, the student creates a document or works on a document. The teacher can see the changed hujjatni because he has access to it. The adoption of cloud computing is the usual ongoing irreversible process.

Today, cloud computing is something that every person uses almost every day. The rapid spread of cloud technology is making it difficult for us to integrate cloud services into an educational institution system. Cloud computing has the prospect of being widely used in education, research and practical developments and distance learning. The use of cloud technology in the education system makes it possible to make the educational space open.

Conclusion. In summary, it is necessary to adapt the educational system to the digital generation through the mass and effective application of innovative educational technologies and didactic models based on information and communication technologies. At the same time, in the educational process, a research-based approach should be actively used, with which it is possible to develop students ' skills in scientific research and to shape their creative abilities and creative thinking based on IT-competence.

Thus, there is a need to determine the essence of continuous education and the methodological framework of consideration of problems within the organization of multi-stage pedagogical personnel training for innovative professional activities in digital education.

References:

1. Агапонов, С.В. Выбор платформы для дистанционного обучения: проблемы и решения / С.В. Агапонов // Телекоммуникации и информатизация образования. – 2005. – № 1. – С. 48–55.

2. Романова И. Облачные технологии и их применение // Молодой ученый. — 2016. — № 17.1. — С. 109–112.
3. Гавриленкова, И. В. Информационные технологии в естественнонаучном образовании и обучении. Практика, проблемы и перспективы профессиональ-ной ориентаци. Монографии / И. В. Гавриленкова. — М.: КноРус, 2018. — 284 с.
4. Галиновский, А.Л. Совершенствование системы подготовки кадров с использованием компьютерных информационных технологий / А.Л. Галиновский // Ориентир. – М.: Изд-во МГОУ, 2008. – С. 26–48.
5. Трайнев. В. А. Новые информационные коммуникационные технологии в образовании: Информационное общество. Информационно-образовательная среда. Электронная педагогика. Облачно-модульное построение информационных технологий / В. А. Трайнев. — М.: Дашков и К, 2013–320 с
6. Федотова, Е. Л. Информационные технологии в науке и образовании: Учебное пособие / Е. Л. Федотова, А. А. Федотов. — М.: Форум, 2018. — 256 с.
7. https://moluch.ru/archive/62/9448/ — Применение облачных технологий в образовании.
8. Gayratovich, E.N. (2019). USING VISUAL PROGRAM TECHNOLOGY METHODS IN ENGINEERING EDUCATION. European Journal of Research and Reflection in Educational Sciences Vol, 7(10).
9. Gayratovich, E.N. (2021). SPECIFIC ASPECTS OF EDUCATIONAL MATERIAL DEMONSTRATION ON THE BASIS OF VISUAL TECHNOLOGIES. International Engineering Journal For Research & Development, 6(ICDSIIL), 3-3.
10. G‘ayratovich, E.N. (2022). It Is A Modern Educational Model Based On The Integration Of Knowledge. Eurasian Scientific Herald, 5, 52-55.
11. Ergashev, N., Meyliqulova, M., Xamitova, R. N., & Namozov, D. (2021). ANALYSIS OF COPYRIGHT SOFTWARE CREATING VISUAL ELECTRONIC LEARNING MATERIALS. Интернаука, (18-4), 24-25.
12. Xolmurodov, A.E., & Ergashev, N.G‘. (2021). SPECIAL ASPECTS OF DEMONSTRATION OF EDUCATIONAL MATERIAL BASED ON VISUAL TECHNOLOGIES. Современное образование (Узбекистан), (7), 29-34.
13. Ergashev, N. G. (2021). METHODS OF USING VISUALIZED EDUCATIONAL MATERIALS IN TEACHING PROGRAMMING LANGUAGES IN TECHNICAL UNIVERSITIES. INNOVATION IN THE MODERN EDUCATION SYSTEM: A Collection Scientific Works of the International Scientific Conference (25th February, 2021) - Washington, USA: "CESS", 2021. Part 3 - P.
14. Ergashev, N. G. (2020). USE OF VISUALIZED ELECTRONIC TEXTBOOKS TO INCREASE THE EFFECTIVENESS OF TEACHING FOREIGN LANGUAGES. Progressive Academic Publishing, UK www.idpublications.Org.
15. Ergashev, N. G. (2020). Didactic fundamentals of electronic books visualization. South Asian Academic Research Journals.
16. Ergashev, N. G. (2020). Using the capabilities of modern programming languages in solving problems of technical specialties. South Asian Academic Research Journals.