THE COMPANY "DEL a.s." (CZECH REPUBLIC) NES NOVA DUBNICA sro (SLOVAK REPUBLIC) UNIVERSITY OF MALAYSIA PAHANG (MALAYSIA) UNIVERSIDAD NACIONAL AUTÓNOMA DE MÉXICO (MÉXICO)



# **CURRENT ISSUES OF SCIENCE**

## **MATERIALS** OF THE IV INTERNATIONAL RESEARCH AND PRACTICAL INTERNET CONFERENCE

April, 29, 2023

Zdar nad Sazavou, 2023

DEL a.s.

### DEL a.s. Strojírenská 38, 591 01 Žďár nad Sázavou, CZECH REPUBLIC

Materials of the IV International research and practical internet conference "Current issues of science", – 2023.

#### ISBN 978-966-8796-16-5

**Current issues of science :** Materials of the IV International research and practical internet conference (April, 29, 2023) : collection of abstracts // for the general ed. Ph.D Serhii Onyshchenko. – Zdar nad Sazavou : "DEL a.s.", 2023. – 23 s.

The collection includes materials of the IV International Research and Practical Internet Conference "**Current issues of science**". The materials of the collection will be useful for researchers, scientists, graduate students, researchers, teachers, students

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#### PEDAGOGY AND PSYCHOLOGY

#### ICT-COMPETENCE OF A MODERN TEACHER OF ENERGY DISCIPLINES

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The problem of professional competence of modern pedagogical personnel in the field of information and communication technologies (ICT-competence) is relevant both in pedagogical theory and in the practice of education. In recent years, the concept of ICT-competence is often used in scientific and pedagogical literature and regulatory and management documents in connection with the increasing importance of ICT in the functioning of the education system and distance education in general. Wide use of information and communication technologies form a demand for the renewal of the information and educational environment of higher education institutions, as well as the effective use of its resources. And this is impossible without continuous professional development of teachers [1, 3]. In this case, the information and educational environment acts as a sphere and a means of developing their professional competence. In this, the continuous change of its potential requires anticipatory development of ICT-competence of teachers of educational institutions [2, 4].

To date, the implementation of ICT is carried out in the following directions:

• construction of lessons using software multimedia tools: educational programs and presentations, electronic textbooks, videos;

• implementation of automatic control: use of ready-made tests, creation of own tests, using test shells;

• organizing and conducting laboratory workshops with virtual models. Many phenomena that cannot be studied in laboratory work due to the lack of equipment, time constraints or are subject to direct observation can be studied in sufficient detail in a computer experiment.

• virtual tours

• working out the results of the experiment.

• development of methodical software tools.

• use of Internet resources.

• communication technologies: distance Olympiads, distance learning.

Implementation and training of ICT is impossible without material and technical base. Every year, work is carried out to improve it [1–4].

One of the main directions of informatization of education is the use of ICT in order to improve various approaches to learning, focused on the development of the intellectual potential of those who study in the conditions of informatization of modern society.

According to the order of the society, in which most of the information is presented in electronic form: the teacher must be focused on the formation of this competence. In this regard, the teacher of energy disciplines himself must have a set of certain ICT-competencies.

The ICT-competence of a modern teacher of energy disciplines refers to the personal quality of the teacher, which is manifested in his readiness and ability to independently use information and communication technologies in his professional activity. The process of forming a teacher's ICT-competence has a developmental character. Also, a teacher of energy disciplines must have subject-oriented ICT-competence, that is, be able to master specialized technologies and resources developed in accordance with the requirements for the content of a particular educational subject, as well as form readiness for their implementation in educational activities.

The use of new information technologies significantly facilitates the activity of the teacher:

First, keeping various documentation (planning, lesson notes, reports).

Secondly, a teacher of energy disciplines, using a computer, can prepare various didactic materials.

Thirdly, the teacher opens up the possibility of using a multimedia projector, interactive whiteboards, and electronic magazines. The use of electronic textbooks in classes plays an important role. Thanks to the interactive presentation of the material, students develop a creative approach to education, the student acquires the skill of independent work, the level of perception of the material increases, the student takes an active position during the entire lesson, when studying any topic.

Fourth, the teacher of energy disciplines can independently develop tests that control the programs. To create tests, the teacher does not need to have deep knowledge of programming, as many programs are designed to create interactive tests based on forms.

Fifth, the use of the Internet opens wide opportunities for the teacher:

• participate in seminars of various levels on the use of ICT in educational practice;

• participate in professional competitions, online forums and seminars;

• use a wide range of digital technologies and tools when preparing for classes, in project activities: text editors, image processing programs, presentation preparation programs, spreadsheets;

• ensure the use of Internet resources;

- form a bank of educational tasks that are performed with the active use of ICT;
- develop own projects regarding the use of ICT.

The computer is only a tool, the use of which fits organically into the education system, contributes to the achievement of the set goals and objectives of the lesson. The computer does not replace the teacher or the textbook, but fundamentally changes the nature of pedagogical activity. The main methodological problem of teaching shifts from how best to tell the material to how best to show it.

The inclusion of ICT in the course of classes makes the educational process interesting and interesting, creates a cheerful, working mood in students, facilitates overcoming difficulties in learning educational material. Various points of application of information and computer technologies support and strengthen students' interest in energy disciplines. The computer can and should be considered as a powerful lever for mental development of the individual.

It should be noted that the time for preliminary training of the teacher during the use of ICT at the first stage is certainly increasing, but the methodical base is gradually accumulating, which greatly facilitates this training in the future.

The level of ICT-competence is reflected in: development of resources; inclusion in the system of continuous education; innovative activities; transformation of its pedagogical system; creation of local environments. The informational and educational environment of higher education institutions acts as a means and sphere of personal development of teachers, forms the construction of personal changes.

From the above, we can draw a conclusion about the main aspects of ICT-competence:

• availability of a sufficient level of functional literacy in the field of ICT;

• effective and justified application of ICT in activities to solve professional, social and personal tasks;

• understanding of ICT as the basis of a new paradigm in education, aimed at the development of students as subjects of the information society, capable of creating knowledge, who are able to operate with masses of information to obtain a new intellectual and operational result, IHE reached a modern level.

The ICT-competence of teaching staff provides implementation within the framework of the two-level model of the teacher's ICT-competence: new goals of education; new forms of organization of the educational process; new content of educational activities.

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