The article examines modern trends in the creation of an informational educational space, the issue of the introduction of information and digital technologies that ensure effective interaction of individuals in society; the essence of the concept of “informational and digital competence” of the teacher of the New Ukrainian School, the structure of the informational and digital competence of the teacher based on integration, namely: technological literacy, deepening of knowledge, creation of means of information provision of the needs of humanity, with the help of technical means; an analysis of international and domestic legal documents regarding the formation of information and digital competence of teachers was carried out. It was determined that in the conditions of the reform of modern education in Ukraine, the formation of the teacher’s information and digital competence becomes relevant, and the specific tasks of the development of the educational process during the implementation of the Concept of the New Ukrainian School in general secondary education institutions, where information and digital competence is one of the professional skills of the teacher, are outlined. The ability to apply information and communication technologies in the educational process of an educational institution, and the ability to receive information and operate it according to one’s own needs and requirements in the development of programs, documents, and organization of cooperation. Priorities, technological principles of building an information and educational environment, implementation of effective methods of teaching and access to knowledge, formation of information and digital competencies of the teacher, which is a powerful tool that contributes to the improvement of the process of creation, storage, processing, and distribution of educational materials, intensification of the educational process, increase speed and quality of perception, understanding and assimilation of knowledge by students, as well as joint work with them; the definition of the concept of “information and digital competence” is clarified. The Digital Competence Framework for pedagogical workers is an important tool for the creation of educational standards, assistance in the creation and planning of educational initiatives aimed at increasing the level of digital literacy and the practical use of IT technology tools and services, the development of educational programs by providers of educational services (DigCompEdu), developed European Joint Research Center; their main provisions, the views of researchers regarding the information and digital competence of the teacher, defined according to the professional standard of the teacher, are disclosed because the use of digital technologies in ed-
ucation is currently one of the most important and stable trends in the development of the global educational process. Key words: competence; digital technologies; information and digital competence; the framework of digital competence; the structure of information and communication competence; educational process.

INTRODUCTION

One of the important issues related to the development of innovative technologies, and innovative technical and technological processes is the formation of the teacher’s information and digital competence in the modern conditions of education reform in Ukraine. The society that led to the reorientation of the national education system characterizes the country’s competitiveness, because the high-quality, thorough knowledge of the students of the New Ukrainian School determines one of the main factors of success, allowing the learning process mobile, differentiated, and individual. And the teacher must learn to create and use multimedia and interactive content, including the use of «cases», research and research work, the project method, and developmental educational games, to become a leader in positive changes in education.

Innovations in education and science are an important factor in the success of the New Ukrainian School, since the end-to-end application of information and digital technologies in the educational process produces the economic growth of the country, becomes the basic foundation of society, turns into an integral part of a person’s lifestyle and has a mostly balanced, realistic character. Possession of these skills contributes to the improvement of the quality of education; adaptability, manageability, interactivity, a combination of individual and group work in lessons, and time limitlessness of learning become characteristic of the educational process in educational institutions.

The responsible use of information and digital technologies for managing information, communications, and creating content motivates the teacher to provide the educational process effectively and to adapt to the rapid development of information and digital competencies of students, which is directly dependent on the achievements of modern science and education.

The research of scientists in modern conditions requires not just technological recommendations for the formation and development of information and digital competence of education seekers since the growing practical efficiency of science and technology acts as a powerful stimulus that guides and accelerates the development of innovations. The need for the formation of information and digital competence is an urgent task for teachers because children must learn to work with information, evaluate information sources, especially in the current difficult conditions of military operations in Ukraine. This can only be achieved in a team (pairs, groups), analyze what they have read (seen) and present the final product not only in text format.
The Ministry of Education and Science of Ukraine, and the National Academy of Pedagogical Sciences of Ukraine carried out significant scientific research and developed normative documents, presented the Concept of the New Ukrainian School (2016), which identified leading information and digital competence.

The Law of Ukraine «On Education» (2017) states that the goal of modern education is the comprehensive development of a person as an individual and the highest value of society, his talents, intellectual, creative and physical abilities, the formation of values and competencies necessary for successful self-realization, the education of responsible citizens, capable of making a conscious social choice and directing their activities for the benefit of other people and society, enriching on this basis the intellectual, economic, creative, cultural potential of the Ukrainian people, raising the educational level of citizens to ensure the sustainable development of Ukraine and its European choice [10].

The primary task of the Concept for the Development of the Digital Economy and Society of Ukraine for 2018-2020 is the formation of a national policy of digitalization of education, as a priority component of the education reform, which provides for:

- saturation of the information and educational environment with electronic and digital devices, means, and systems;
- establishment of electronic communication exchange between them, which enables integrated interaction of virtual and physical;
- creating a cyber-physical educational space, identifying specific initiatives to connect classrooms of educational institutions to broadband Internet;
- creating and implementing modern models of providing education seekers with computer tools;
- implementing preparation, adaptation, and organization of access to multimedia technologies and the creation of appropriate digital educational platforms for use in the educational process and education management [3].

In 2021, the Cabinet of Ministers of Ukraine approved the Concept of the Development of Digital Competencies until 2025, which emphasizes the special importance of this decision, because the encouragement of teachers to the information and digital educational space, such as the worldwide Internet, will raise the learning process to a qualitatively new level, ensure the formation of development and social adaptation of students in the conditions of globalization of the world community.

In the Order of the Cabinet of Ministers of Ukraine dated 14.12.2016 No.988 «On the approval of the Concept of State Policy Implementation in the Reform of General Secondary Education «New Ukrainian School» for the period until 2029, it is stated that the Concept will contribute to improving the quality of general secondary education as a whole; overcoming territorial differences in the quality of general secondary education; ensuring the prestige of professional education, etc. [11].

The problems of the development and implementation of information, communication, and digital technologies in national education, the key ones of which are highlighted in the National Report on the State and Prospects of the Development of Education in Ukraine (2021), need urgent solutions, therefore, among the main international organizations, large corporations and projects that support formation and development of a person's ability to use modern ICT - European Education Fund (EFE), United Nations Educational, Scientific and Cultural Organization (UNESCO), European Certification of Computer Users (ECDL), Microsoft Corporation (MICROSOFT), Corporation «Integrated Electronics» (INTEL), etc.

Modern Ukrainian society, under the influence of the latest information and digital technologies, is undergoing significant transformations, namely: processes of digital restructuring of social development are taking place; digitization of education becomes an unconditional requirement for the reform of national education, the primary task of the effective development of the information policy of the state.

LITERATURE REVIEW

In the studies of domestic and foreign scientists who studied the issue of the effective use of information and digital competencies in the educational process of the New Ukrainian School, the problems of implementation and effective formation of information and digital competencies in education were highlighted.

V. Bykov, analyzing the issue of the competence approach and the development of digital competence of the subjects of the educational process, determined in his work «Digital Transformation of Society and the Development of the computer-technological Platform of Education and Science of Ukraine» the development of modern trends in the growth of the information society and the introduction of digital technologies in education, important steps regarding the digital fundamental change of society and the development of the computer-technological platform of education and science of Ukraine; creation of technological support for institutions of general secondary education based on cloud technologies; deepening knowledge of programming in computer science education of education seekers [1].

The research of domestic scientists is devoted to issues related to the identification and interpretation of the concept of information and communication competence. Taking into account the significant educational potential of modern information and
digital technologies and the rapid pace of their development, due to the continuous development and improvement of hardware and software, scientists A. Kostyuchenko, and O. Furman implement the provision of anticipatory formation of information and communication competencies of teachers, the formation of the motivation of each teacher need and readiness for continuous self-education in the field of education [15].

G. Tkachuk and M. Medvedeva prove in their investigations that information and digital competence involve the formation of knowledge, abilities, skills, and work experience in teachers, which is the main means of implementing the use of information and digital technologies, the creation of pedagogical software tools and information and communication technologies since the specified competence of teachers forms an optimally balanced use of them in the educational process, involves familiarization with innovative educational technologies and the ability to use them in professional activities [14].

Information and digital competence is defined as one of the ten key competencies of the New Ukrainian School, necessary for every modern individual for successful professional activity, quick and effective mastering of the latest technologies, and their application for personal needs. As noted by researcher L. Chernikova, achieving this goal is ensured based on personal awareness and the formation of information and digital competencies that will determine the professional and life realization of a modern teacher of the New Ukrainian School [5].

According to L. Kartashova, digital competence is multifunctional and can be applied in various spheres of life, it is also transversal, that is, acquired skills and abilities, in terms of the European educational space, meet the requirements of new professions and specialties that appear on the labor market and help direct the acquired knowledge, personal abilities of the child to solving real-life situations. The formation of these competencies also contributes to their development and orients students to lifelong learning [2].

In the scientific research of O. Shparyk (2021), specific steps that should take place in society are analyzed, the ways of future exploration and implementation of innovations in the field of digitalization are determined, as well as the promotion of information technologies in the educational process of general secondary education institutions; the strategic orientations of digital transformation in education were clarified to determine a positive European experience for Ukraine. «European strategic guidelines for digital transformation in education» [17].

AIMS AND OBJECTIVES

The purpose of this article is to analyze the research of domestic and foreign scientists and to substantiate the importance of the formation of information and digital competencies of a modern teacher in the New Ukrainian School.

METHODOLOGY AND RESEARCH METHODS

To achieve the defined goal, a complex of research methods was used, which included: analysis and systematization of research materials, comparison of domestic and foreign scientific and pedagogical sources, and regulatory and legal framework on the research problem.

The identification of previously unresolved parts of the general problem involves the determination of actions regarding the formation of information and digital competencies of the modern teacher of the New Ukrainian School, the use of innovative technologies for the creation, search, processing, and exchange of information in the educational process of general secondary education institutions, namely: information and media literacy of students education, familiarization with the basics of programming, algorithmic thinking, the ability to work with databases, mastering Internet and cyber security skills, understanding the ethics of working with information (copyright, intellectual property, etc.).

RESULTS

The rapid development of civilizational processes in Ukraine, the introduction of innovative educational practices, a significant increase in the volume of information, and digitalization strengthen the need for every conscious person to acquire new knowledge during his life, sharpen the need for thorough, high-quality education, the ability to adapt to changes and innovations in society.

The Concept of the New Ukrainian School states that «... the end-to-end application of information and communication technologies in the educational process and management of educational institutions and the education system should become a tool for ensuring the success of the New Ukrainian School; ... and a modern teacher must be open to innovation, ready to self-improve, be in constant creative search, move forward - work on his professional development, master new professional roles [5].

Students of the New Ukrainian School must be familiar with all the necessary competencies and, by their new roles, be able to choose their direction, their specialization, because modernity requires graduates not only thorough theoretical knowledge obtained in a general secondary education institution but also the ability to independently find, analyze and apply in non-standard life situations [4].

The use of information and communication technologies in educational institutions in the process of developing and forming teachers' digital competence in the conditions of using the means of information and digital technologies and creating conditions for their integration into the educational process is especially important nowadays.
In 2013, the Joint Research Center (JRC) of the European Commission launched a scientific project to develop and publicize the digital competence system of citizens DigComp, and in 2016 the Digital Competence Framework 2.0 was published. (English, DigComp 2.0: The Digital Competence Framework for Citizens). Therefore, the Digital Competence Framework for Citizens with a description of descriptors and a model of progress, developed and presented in the countries of the European Union (Digital Competence Framework for Citizens (DigComp 2.0 and DigComp 2.1)) becomes especially relevant.

A significant amount of work on defining the issues of creating framework documents in the field of education and employment is carried out by international organizations, including the European Research Center of the European Commission, which organized a working group, developed and presented the Citizen’s Digital Competence Framework (DigComp 2.0, 2016), which became a reference for the development standards in education and employment in European countries; the main forms and methods of developing the digital competence of participants in the educational process, the teacher and students, as well as the principles of creating a digital educational environment in an educational institution were outlined.

Information and digital competencies are important personal qualities without which it is impossible to imagine the effective work of a modern teacher. In the conditions of periodic lockdowns and quarantines, it is digital technologies that make it possible not to stop learning, but to continue it safely in a remote or mixed format, therefore, today, digital literacy for the teacher becomes a priority, and the use of these technologies in computer-oriented methodological systems of education is determined by the teacher.

The framework of digital competence for educators is today a reference model developed by European countries to create a common language, scientific terminology, and educational standards, which is extremely important for domestic educators as well. The document describes 22 competencies grouped into six areas of digital competence of teachers:
- professional engagement – use digital technologies for communication, collaboration, and professional development;
- digital resources – search, create, and share digital resources;
- teaching and learning – manage and organize the work and learning process with the help of digital technologies;
- assessment – use digital technologies and strategies to assess students;
- empowering students – using digital technologies to increase inclusiveness and active student engagement in learning.

Promoting students’ digital competence means giving them opportunities to use digital technologies for communication, content creation, development, and problem-solving [18].

According to O. Ovcharuk, the updated framework of digital competence presents descriptors that already describe eight levels of mastery, defined in the form of specific learning outcomes, and the following structure of digital competence is presented, namely:
- spheres (five components of digital competence);
- descriptors and names of competences (corresponding to each area);
- levels of literacy (for each component of competence);
- examples of knowledge, skills, and attitudes (applied to each component of competence) [6].

Russian scientist O. Spirin, researching the content of information and digital competence, characterized six levels of competence development, namely:
- introductory, which involves understanding the need for ICT for the development of education;
- minimal-basic, that is, the ability to use ready-made software products;
- basic, on which the teacher demonstrates knowledge and ability to use the basic concepts of ICT in professional activities;
- advanced/advanced, at which the teacher freely applies ICT knowledge in professional activities;
- research as the free use of ICT, Internet resources in research, and project activities;
- expert - the teacher is an expert on the implementation of ICT in the educational process.

In the educational program for the training of primary school teachers, among the general competencies of a graduate of a pedagogical institution of higher education, information, and digital skills are indicated, which include the ability to use modern means of information and computer technologies to solve communicative tasks in the teacher’s professional activity [13].

**DISCUSSION**

Strengthening the information and informatics training of students, and the introduction of information and digital technologies in the study of all disciplines should be central to the content of education at all levels of education and in all fields. To achieve qualitative transformations in education, digitization, and digital transformation, the scientific works of the named scientists are actively used in the innovative practice of teachers, which involves the effective implementation of a new educational paradigm, the construction of the educational process in a cross-platform format - the ability of software to work on more than one hardware platform.

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(operating system), which is provided thanks to the use of high-level programming languages, a development and execution environment with the introduction of the latest techniques that support conditional compilation, layout and execution of code for various platforms.

Unfortunately, with inadequate responsibility, and the lack of a systematic approach to the implementation of the state educational policy on issues of digital technologies in the educational process of educational institutions, the digital competence of teachers is not fully formed during their professional pedagogical activities, which does not meet the modern requirements of a digital society, since information and digital the competence of a modern teacher involves confident and critical use of digital technologies in professional activities, everyday life and communication.

A teacher who possesses informational and digital competencies has the opportunity to integrate the latest educational technologies into his educational programs, methodical development of lessons, which will improve the efficiency of assimilation of educational material by students; use digital technologies to create and distribute educational content promotes meaningful communication and partner cooperation between the teacher and the student; requires a reflexive and critical, and at the same time inquisitive, open and perspective attitude to their development; the ability to access the credibility and reliability of information sources, the impact of information and data on consciousness and personality development; forms the teacher’s desire to learn throughout life and freely adapt to new educational technologies, which opens up many opportunities, to be open to new ways of teaching and learning.

Domestic researchers V. Bykov, O. Bilous, Y. Bogachkov, O. Spirin, and O. Ovcharuk in the methodological recommendations «Basics of standardization of information and communication competencies in the education system of Ukraine» define knowledge, skills, and attitudes that constitute cognitive, operational and axiological aspects of information and digital competence:

- knowledge, in particular of the features of information flows in the field of education and information security;
- abilities and skills, which include the ability to obtain information from various sources in a comprehensible form, work with various information and critically evaluate it, use information and communication technology tools and computer technology skills in professional activities;
- the individual's attitude towards the use of information and communication technologies for responsible social interaction and behavior [8].

**CONCLUSIONS**

Education is one of the priority factors that determines the future of the Ukrainian state, which, together with science, is a significant factor in the progressive progress of civilization. Based on the results of the research, it was determined that information and digital competence is one of the most important qualities of a teacher of a new Ukrainian school today. According to the opinions expressed, the formation of information and digital competencies will allow the teacher not only to use the means of digital technologies for professional interaction with colleagues, students, and their parents, their professional development, and provide learning strategies focused on students, their evaluation, improvement of the effectiveness of feedback in the learning process, but also involves the acquisition of skills and experience in the formation of students’ information and digital competence.

Modern teachers must effectively use innovative technologies in education, have a certain level of information and digital competence to use educational technology tools in the educational process, namely: online resources, online platforms, interactive whiteboards, and learning management systems, effectively integrate digital technologies in teaching methods and lesson plans, free navigation in the digital educational space, makes it possible to make the educational process in general secondary education institutions accessible and flexible.

**REFERENCES:**


