

Media dimension of modern civic education: the humanitarian aspect

Dimensión mediática de la educación cívica moderna: el aspecto humanitario

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Abstract

The aim of the article: The aim of this article was to identify the humanitarian features of the use of media technologies in education. To achieve this goal, an analytical research was conducted on the topic of media in education.

Research methods and techniques: The historical and comparative-legal method was used to solve the issue. Using a comparative legal method, a comparative analysis of the level of using media in education was carried out.

Results: As a result, conclusions were made about the sharp increase in the level of use of media in various types in the process of civic education.

Conclusions: It was concluded that media have both positive and negative effects on consciousness of information. Active use of media technologies helps to recreate the learning process at a distance, involves the use of a variety of interactive activities. And, the constant use has a burden than the usual format of education. Therefore, the problem of teaching methodology of using media in education becomes relevant. As a result, it was determined that the topic of effective use of media technologies in the educational process is becoming increasingly important.

Keywords: education, human rights, information technologies, digitalization, education, teaching, media resources.

Resumen

El objetivo del artículo: El objetivo de este artículo fue identificar las características humanitarias del uso de las tecnologías mediáticas en la educación. Para lograr este objetivo, se realizó una investigación analítica sobre el tema de los medios de comunicación en la educación.

Métodos y técnicas de investigación: Se utilizó el método histórico y jurídico-comparado para resolver el tema. Mediante el método jurídico-comparado, se realizó un análisis comparativo del nivel de utilización de los medios de comunicación en la educación.

Resultados: Como resultado, se obtuvieron conclusiones sobre el fuerte aumento del nivel de uso de los medios de comunicación de diversos tipos en el proceso de educación cívica.

Conclusiones: Se concluyó que los medios de comunicación tienen efectos tanto positivos como negativos en la conciencia de la información. El uso activo de las tecnologías de los medios de comunicación ayuda a recrear el proceso de aprendizaje a distancia, implica el uso de una variedad de actividades interactivas. Y, el uso constante tiene una carga que el formato habitual de la educación. Por lo tanto, el problema de la metodología de enseñanza del uso de los medios de comunicación en la educación se vuelve relevante. Como resultado, se determinó que el tema del uso eficaz de las tecnologías de los medios de comunicación en el proceso educativo es cada vez más importante.

Palabras clave: educación, derechos humanos, tecnologías de la información, digitalización, educación, enseñanza, recursos mediáticos.

1. Introduction

The transformations that have taken place in industry over the last century, caused changes in the social, political and economic life of the world community and laid the foundation for the formation of the information society, have inevitably touched the sphere of education as well. The development of human civilization requires both changes in the training of specialists in various fields and specializations and, at the same time, changes in approaches to forms, methods and technologies in the educational process itself. Moreover, the rapidly spreading processes of globalization, in particular those which include migration movements, intensify cooperation between the states of the world in the humanitarian sphere, intensify their cultural, social, educational interconnections and interdependence. Nevertheless, despite the relevance of the research topic and the wide field for scientific research, the problem of using information and communication technologies in the educational process through the prism of the humanitarian aspect remains understudied. Therefore, there is a need for detailed research on relevant issues. The relevance of this work is determined by the need to study the use of media technologies in the educational process in the context of the humanitarian concept. Globalization, which is taking place in almost all countries of the world, is marked by technological progress. “Technological advances, especially communication and information technology, create the increasingly borderless world” (Murdiono & Wuryandani, 2021). Undoubtedly, they also affect the humanitarian sphere, in particular its component that provides the educational process, both in individual states of the world, and global educational processes involving all states. No less important is the aspect of multimedia in the educational process manifested against the background of the COVID-19 pandemic when the whole world was faced with the problem of limited social contacts and the need for isolation. So, media technologies play a significant role in education, especially during the crisis of the 2019-2022 pandemic. As a result of the Covid-19 coronavirus pandemic, the relevance and relevance of the use of information and communication technologies in all areas of human life, including education, has increased dramatically.

“The rapid development of media technologies and the expansion of their capabilities leads to the fact that the media are now present in almost every sphere of life and become, in modern conditions, a commodity of the industry of consciousness” (Rekun, 2020). However, noting the use of information and communication technologies during, for example, pandemic phenomena raises a variety of humanitarian questions. Thus, At the state level, however, the complex humanitarian issues surrounding the use of such media technologies have not yet been resolved. Governments at this stage are mainly focused on ensuring epidemiological safety during the educational process. In addition, there is an obvious increase in spending on education due to the introduction of information and communication technologies in the educational process, which is not always possible, especially when government funding is provided for more important social areas, such as health care during pandemic phenomena in the world. “Wenn Nachhaltigkeit in Zusammenhang mit Wirtschaft gestellt wird, ist eines der größten

Hindernisse deren starke Fokussierung auf den Konsum und dessen Steigerung” (Aniobi et al., 2021). Lack of funding also leads to the issue of using the most effective media to achieve greater effectiveness in the educational process remains underdeveloped.

Not only the issue of providing the state with multimedia tools for the educational process is relevant in terms of prioritizing the funding of certain social areas. With regard to students, teachers and educators, who are direct participants in the educational process, the use of multimedia techniques in the educational process also causes certain difficulties. We are talking about the issue of providing the subjects of the educational process with appropriate technological means and devices that would allow the use of information and communication technologies during training, as well as on the moral application of multimedia technology in it, which is associated with indirect interference in human privacy.

However, according to forecasts, the importance of information and communication technologies will grow every year. Every year the introduction of effective and innovative technologies in educational processes becomes more urgent. З іншого боку, необхідно враховувати те, що “Im Kern geht es um die Frage, welche Programme Werte für die Gesellschaft vermitteln und inwiefern nicht auch private Sender ohne einen entsprechenden Auftrag zum Gemeinwohl beitragen” (Meynhardt et al., 2019). Accordingly, this necessitated an urgent study of this issue.

Especially under the conditions that, however, there are significant problems and unresolved issues in the field of media dimension in the educational process. As an example, we are talking about the use of social networks by schoolchildren and students can lead to institutional mistrust and negatively affect democratic values and behavior (Sandberg, 2018).

If we note the importance of information and communication technology in the learning process and its benefits, we must also note another disadvantage of multimedia learning, which directly concerns children. It is important to note that media technologies have a significant impact on the health of different age groups, and especially have significant consequences for the health of children. Thus, a dilemma arises: on the one hand, Under the the Constitution of Ukraine, a person, his life and health is the highest social value in the state, and from the other one, “the information impact on the Internet, the information wars of today have created a need to develop media literacy skills” (Kovalova, 2020). So, when it comes to the training of specialists with the help of information and communication technologies in the educational process, we must also take into account the medical risk, the use of which they contain.

The development of the information society poses new challenges to the world, however, it must be borne in mind that new technologies also conceal threats. Given the current threats in the information space, the issue of information protection and ensuring human rights to reliable information in the early twenty-first century is becoming crucial for both Ukraine and the world. In the conditions of hybrid war, the primary task of state policy is

to ensure the rights and freedoms of citizens, including information under Article 50 of the Constitution of Ukraine. This must be taken into account in the development and application of media technologies in the educational process. Also, the issue of development of media resources in the educational process is becoming increasingly important in connection with the European integration of Ukraine and in accordance with the Bologna Process. Accordingly, the humanitarian component of this issue becomes especially relevant in connection with the adaptation of national legislation in the field of education to European legislation. It is these factors that determine the relevance of this article.

The purpose of this article is to identify the features of historical and social development and the provision of media technologies in the educational process of educational institutions of different levels in different countries. According to the goal of the study, the following main tasks were defined:

This article defines the following tasks:

- determine the place of information and communication technologies in the field of education;
- to analyse the state of practical use of media technologies in the educational system;
- identify the main gaps and trends in the use of media technologies in the education system in different countries.

2. Theoretical Framework or Literature Review

Many works of world scientists have been devoted to the use of information and media technologies in the educational process in recent years. This indicates the growing relevance of this issue in the world. Accordingly, the problem of introducing technologies into the educational process has long been widely discussed in science, however, despite the scientific value of these works, they lack analysis and interrelation with the humanitarian sphere as a whole, as we pointed out above. The study of the sphere of education, the educational process, methods and technologies introduced in it, including multimedia, should take into account the humanitarian aspect, which is broad in its content and includes not only social, but also cultural, spiritual and moral-ethical cause-effect relations affecting the development of digital society.

Thus, “Research in 2017 notes that technological and economic development benefits a minority of the world's population, forcing universities to consider how transforming the innovation structure for inclusive development can help broaden their understanding of their “third mission” (Kruss & Gastrow, 2017). Accordingly, conditions in the national and local political environment intersect with the conditions of organization in universities and communities, as well as in the interaction itself, to produce results that affect livelihoods and development. This provision shows that all spheres of society are closely linked, especially when it comes to the education system, which not only provides the teaching

and learning process but also carries out educational work with the young representatives of the generation: pupils and students.

However, it is necessary to be very careful both for the representatives of the state authorities in the functioning of the educational system in the state, and directly to the teachers during the educational process, so that the education does not turn into the imposition of certain ideals, views and opinions on young people. Thus, the 2018 article states that propaganda poses a new challenge to civic education. The author explores the tension between education and advocacy for civic education for adults, considering civic education as a defence against attempts at advocacy and advocacy as a possible element of civic education. The main proposal of the article is to root civic education in the tradition of the German concepts “Bildung” and “Mündigkeit”, to oppose civic education to propaganda or manipulation (Kloubert, 2018). Information and communication technologies, used both during the educational process and outside of it, provide access to information of any content, but it is not always reliable and verified. On the other hand, free access to information through information and communication technologies contributes not only to the level of training of specialists, but also promotes their creative and intellectual search. For example, further in 2018 was determined that people's knowledge management, intellectual capital, organizational skills and organizational culture have a significant direct and indirect impact on innovation, emphasizing the importance of their simultaneous improvement (Chatzoglou & Chatzoudes, 2018). Thus, the development and implementation of information and communication technologies in the process of learning, stimulating and encouraging innovative practices also entails positive changes in the economy, which further demonstrates the close connection of political-economic and socio-cultural processes in a digital society.

Despite the obvious benefits, the introduction of new information and communication technologies in learning processes cannot completely displace those that have existed for many decades and have been tested in practice. Thus, in 2019, was pointed out “that the use of virtual technology can replace practice. Accordingly, systematic, scientifically sound technological knowledge is indispensable in the future world of work, but this is not enough to meet the requirements in practice” (Böhle & Sauer, 2019). The article identifies an important issue that educators around the world think about how best to prepare students with the knowledge, skills, attitudes, and behaviors to be informed, interested, and caring citizens of the 21st century.

Equally interesting to study is the experience of introducing media technologies into educational processes in those countries that have recently introduced them, following the completion of relevant political and social reforms. Thus, next article analyzed the evolution of media literacy on the example of Egypt (Singer, 2019). Accordingly, the author identifies that recent integration into the community requires digital skills, which have finally come to be understood as vital skills, along with reading, writing and arithmetic skills. Digital integration is no longer a matter of competence, skills or specialization, but, in fact, one of the common definitions is that media literacy includes

the ability to access, analyse, evaluate and transmit messages through a variety of messages (Roberts *et al.*, 2019).

From another perspective, the impact of information and communication technologies in scientific work, which explored how they relate to cultural phenomena in society, as well as how they affect young people, which, as a social category, is their most common user. Another 2020 science work finds that the media is an arena for the discursive struggle for identity, culture and geography. The media organizes our ways of thinking and acting in relation to our perceptions and perceptions of “us” and “others”. It was noting that with the spread of participatory information technology (young), media users reinforce or challenge media events through activities such as sharing, evaluating likes and comments (Hintermann *et al.*, 2020).

A similar opinion to the previous one is expressed by Ovcharuk (2020), who notes, who identified the ability to use digital learning tools as a new technological basis for the development of self-education skills, forms a modern culture and a certain level of digital literacy. Digital competence is now identified as one of the key to lifelong learning and is reflected in the latest strategic documents of international organizations and European educational standards. The author focused on the introduction of «digital civic education» in European countries in order to encourage young people to develop digital skills and their use in the Internet, which involves personal involvement and creativity (Ovcharuk, 2020).

It is also necessary to pay attention to the Ukrainian scientists who researched the problems of interaction, influence and ways of effective implementation in Ukraine of training with the use of information and communication technologies. In 2020 was researching the communication dimension of the modern political system of Ukraine, is structuring the study of communication processes of the early twentieth century within three scientific schools: the first school is related to the study of media effects, the second school of «uninformed voters» specializes in electoral research, the third studies communication processes through socio-psychological studies of political consciousness. The author emphasizes that the selectivity of attention to the media and the predominance of the method of presenting information over its content showed the model of attracting attention. Examining semiotic models of communication, it was found that they endow it primarily with informational, expressive and pragmatic functions (Shlemkevych, 2020). Moreover, the author proved the influence of the development of information and communication technologies on the actualization of the value paradigm of social development.

Young people are the most active category of the population, actively using information and communication technologies, both in studies and in their leisure time. Next, in the same year was noting that there are very few studies directly on the impact on social innovation in universities (Bayuo *et al.*, 2020). Further research, which creates a system

for measuring impact, will support the process of integrating social innovation into the mission of universities.

Confirmation of the importance of studying the peculiarities of the implementation of multimedia learning technologies in the educational process is the following scientific work. So the point is that the introduction of the latest technologies both in industry or economy, as well as in politics and education will be effective only if the active participation of the public of a particular country in this process. Also, in the science work was appropriate to identify that in developing countries there is a growing need to increase public participation. However, in order to reform civic education, it is important to understand the relationship between socio-demographic factors and civic activism (Ajaps & Obiagu, 2020).

Ми здійснили аналіз наукових праць за попередні роки, що висвітлювали проблематику запровадження інформаційно-комунікаційних технологій в освітній процес. Що стосується “the 2022 science work indicates that the existing literature is grouped around four main themes: articles on current citizenship issues related to digital development; technical and critical research of digital technologies in society; the consequences of digital innovations in the management of educational institutions; pedagogical approaches to the development of digital citizenship” (Cappellini *et al.*, 2022).

Thus, the issue of using information and communication technologies is multifaceted and is actively discussed in the scientific world.

3. Methodology

The goal and objectives of the study led to the choice of appropriate methods. The design of the study is formed on the basis of descriptive and quantitative research. This article uses general scientific and legal research methods, among which the historical method is important, which allowed to conduct a detailed study and analysis of the use of media technologies in education in historical context, as well as to study the genesis of the humanitarian aspect of media technologies in Ukraine. and foreign countries. Also with the help of this method the tendencies of media technologies in education to their further development and integration were investigated and analysed. Also, legal and comparative legal methods were used to study the information legislation of Ukraine and the European Union, and their practice in education and to explore the features and gaps in legislation, as well as their impact on integration processes in the humanitarian sphere. The study of statistical data in the article on the topic of the work was carried out with the help of official databases of educational institutions and countries of educational institutions in EU countries. Other participants were not involved in the research process. Ukrainian and foreign scientific and practical materials on the research topic are analysed. Among the researched sources, works were selected that allowed to study the history of the formation of the media dimension in the educational sphere of Ukraine, as well as the practical consequences of their application.

Further, an analysis of the social and legal foundations in the field of educational policy was carried out. Also, an analysis was made of the impact of national legislation and international acts on the development of the media dimension in the educational process. The research procedure included determining the relevance of this research topic, analysis of scientific and practical methods and approaches used to conduct research on the media dimension in the educational process, as well as its impact on the humanitarian sphere.

The study begins with a review of scientific sources for the period from 2018 to 2022 to analyse the main aspects and theoretical basis of European and Ukrainian humanitarian policies of media dimension in the educational process, and accordingly analyse different approaches. Also, it allowed to study the historical background and development of the use of media technologies in the educational process and to determine the directions of its further development. Next, a study of the relevant analysis of research papers and current regulations was conducted.

Further research suggested the selection of practical materials for research based on integrated approach, which allowed a comprehensive study of the article and identify the main problems and prospects. Thus, we conducted a selection of practical and theoretical materials in the field of media measurement in educational processes in accordance with the criterion of territoriality, which allowed to determine the state of development of this problem in different regions of Ukraine and foreign countries. Among them, the experience of the European Union played a significant role.

Next, we analysed the common and distinctive features in different countries humanitarian policies in the field of media technology in the educational process and identified obstacles to the formation of the Ukrainian educational and scientific sphere and based on the principles of EU countries. An important aspect at this stage was the study of the relevance of the European integration process and the goals of sustainable development in these regions.

Relevant monitoring of practical materials on the use of media technologies in the educational process in different countries for their comparison was conducted. As a result, based on the study, we formed conclusions and recommendations.

4. Results and Discussion

Life of a modern person in any sphere of his activity is difficult to imagine without the use of information and communication technologies: they accompany him during work, education, everyday life. Therefore, it is relevant to study those issues of multimedia processes and techniques, which are introduced into the humanitarian sphere of human life. This is obvious from the point of view that it is the closest to the person himself, his life and activities, for example, if we compare it with the sphere of political or economic life, in which the person takes part episodically. However, as we noted above, the

introduction of multimedia methods into the educational process through the prism of humanitarian understanding remains an understudied topic in academic circles. Analysis of research has shown that the media dimension of civic education is a relatively new area of research. The emergence and development of this area is associated with the formation and spread of information technology and media in human life. It is worth noting that due to the pandemic, the overall share of Internet access has increased in the EU (Table 1) (Eurostat, 2021).

Table 1.
Access to internet in EU countries.

Country	2017	2018	2019	2020	2021
Germany	93 %	94 %	95 %	96 %	92 %
Belgium	86 %	87 %	90 %	91 %	92 %
France	86 %	89 %	90 %	-	93 %
Montenegro	71 %	72 %	74 %	80 %	81 %
Austria	89 %	89 %	90 %	90 %	95 %
Bulgaria	67 %	72 %	75 %	79 %	84 %
Turkey	81 %	84 %	88 %	91 %	88 %
Croatia	76 %	82 %	81 %	85 %	86 %

Source: Eurostat, 2021

If you define what exactly is the basis for the creation of information and communication technologies, we are talking about information. It is the main driving force for the implementation of multimedia processes in the humanitarian sphere. Modern multimedia and computer tools, thanks to Web 2.0 technology, allow participants to participate in the creation of information. Accordingly, the participants in the process create their own existential space of the individual. Accordingly, people are not passive users of information, but are actively involved in creating information. Computer media technology has proved to be a carrier of human potential and a space for self-development.

The use of information and communication technologies has proven to be not only an effective way of providing methodological support for the educational process, but also a profitable business. The global e-learning market reached \$ 101 billion in 2019. The total market is projected to grow exponentially by 2026, reaching more than \$ 3.70 billion. The online learning industry is not showing any signs of slowing down.

The pandemic phenomena caused by the spread of coronavirus disease around the world, coupled with social distancing, led to the rapid development of multimedia learning, which was carried out through the Internet. In addition, the spread of such technologies has proved to be a convenient tool for people wishing to learn a new profession or upgrade their skills and abilities in their existing professions. Accordingly, there is an increase in the share of people involved in online courses.

For example, in Germany this is a difference of 10% from 2008 to 2021 (Table 2) (Eurostat, 2021).

Table 2.
Access to internet in EU countries.

Year	%
2008	2
2009	3
2010	3
2011	4
2013	4
2015	4
2016	5
2017	6
2019	7
2020	12
2021	12

Source: Eurostat, 2021

The emergence of new multimedia learning tools provoked the rapid development of information and communication technologies, the creation of new virtual learning platforms and cloud storage for storing information. The most effective ones turned out to be those that were user-friendly and also effective for methodological support of the learning process. Among the most common ways to use the media resource is the widespread use of online learning using the software Zoom, Google meet. Also, the use of hosting services is becoming promising in establishing information and communication interactions in the libraries of schools, creating something like media platforms. “Among them, it should be highlight that Social Sharing Services - web resources for storing and broadcasting information objects in various formats (PowerPoint, Word and Adobe PDF)” (Medvedieva, 2017). Services such as BlogCamp, meebo.com, comdi.com, webinar.ru, etc., are also important in the functioning of modern educational institutions. Moreover, media technology has led to the emergence of new forms of educational process, which poses a number of new questions to society.

At a time when the world realized that stopping the COVID-19 pandemic and leveling its effects on the economy and people's social life was impossible in the short term, multimedia education was supplemented with new information and communication tools through social media. Further, the use of modern programs such as Viber, Whatsapp to address organizational and technical issues in the learning process. Moreover, the use of video and audio content, illustrations and better learning is widespread in higher education, specialized, secondary and primary schools.

An important aspect of the media dimension is media literacy. Media literacy is based on knowledge, skills and trends in media competence. However, multimedia education has not only advantages, but also some disadvantages. We are talking, first of all, about the low level of multimedia literacy of the majority of the population, especially the elderly and elderly. For this category of the population proved difficult to master new information and communication technologies, as well as to use them. Multimedia literacy at the present stage remains an advantage for the population of young and middle-aged people all over the world. Media literacy is an acquired right for children and young people, so it should be adapted to each age group and each educational level.

In addition, multimedia training can act as an effective educational component in the learning process. Today, global economic and political factors influence children's behaviour and can contribute to aggression, violence, domination, depression, obesity, drug abuse and other negative effects on physical and mental health. "The most important way to counteract all these negative consequences is to teach children to look critically at what they see" (Cappellini *et al.*, 2022). That is, media education is an important aspect of modern humanities education.

The development of IT skills in students and schoolchildren is increasingly encouraged in educational institutions. However, as we have noted, information and communication technologies conceal negative consequences for young people. In the era of information society and digitalization, there are significant information and communication risks caused by their development: cyber threats, piracy, fraud on the Internet. Of particular importance are threats to information security of countries in the context of modern information warfare. It is important to note that different countries have different approaches to regulating the use of media technologies.

Thus, it can be argued that in Europe, approaches are gradually developing to support and ensure the formation of media literacy skills in the educational process. The issue of innovative development in education is becoming increasingly important in the world community. Globalization, computerization, and cultural and political change have led to a significant need to review and improve the educational process. As a result, the relevance of this study is due to new societal challenges and needs, a number of media information and threats that have posed new challenges to the world community.

The use of media in the educational process has long been studied by scientists and practitioners around the world. At the same time, the pandemic of 2019-2022 significantly affected the implementation and development of distance education and the active involvement of virtual technologies in the educational process. Accordingly, the need to study the humanitarian aspects of the happiness of the media in education has led to the relevance of this article. The main aim of the article was to identify the humanitarian features of the use of media technologies in education in context of social changes in the world. The article shows that there are different approaches to the concept and value of Internet technologies, modern electronic devices and smaller media in the educational process.

Так, E-democracy and the information society have led to the transformation of the essence of traditional values of the educational process, and to the emergence of new information. Виникає питання, яким чином співіснують вже наявні технології у гуманітарній сфері з новими, інформаційно-комунікаційного змісту. Shlemkevych (2020) emphasizes that heredity in the transfer of traditional values in the information space is absent. This position of the scientist is quite justified, which can be confirmed by analyzing the experience of our country. Analysing the peculiarities of the introduction of information and communication technologies and online services in Ukraine, she noted the strengthening of the virtualization of society; reduction of personal contacts and exchanges; the predominance of consumption values over the values of cognition; production of values as goals values without the formation of a qualitative ideological paradigm of modernity; perception of the ideals of the Internet as one's own view of reality; transforming the role of e-democracy into a source of anti-values, including poverty; increasing the lack of bearers of modern values and, above all, the values of civil society, the social base of which is the middle class. "It turns out that postmaterialist values remain a prospect that is hampered by the dominance of economically determined survival values" (Hintermann *et al.*, 2020).

As we noted earlier, the humanitarian sphere of human life is multifaceted and multi-component. It does not exist in isolation and is in constant transformation and interaction of a transnational nature in order to meet the humanitarian needs and demands of society. On the one side, this creates a positive trend towards internationalization, access to education in any territorial conditions remotely. Programs, services, processes, products and partnerships can improve educational outcomes in innovative ways, such as personalized games on solar-powered tablets that teach math lessons to children in remote areas of the Sudan. Or digital learning platforms that teach refugees and other marginalized children the language of instruction in Greece, Lebanon and Mauritania. "Innovation in education means solving the real problem in a new and simple way to promote fair learning" (Hillman & Baydoun, 2018).

The need of the information society for new professionals, with more knowledge, with a more thorough general and professional, as well as professional competencies prompts the adaptation of the teaching and learning process to the realities of the new digital multimedia world. It is noting that the use of media technologies has contributed to a more open dissemination of information and exchange of experiences between students and teachers. Research in the United States has shown that students who were encouraged to discuss social issues in the open had a higher level of civic knowledge, political efficiency, political interest, civic duty, and expectations of voting. "Also, such students had the highest scores on the competencies of the twenty-first century, including economic knowledge, media interpretation skills and a positive attitude towards various groups" (Ovcharuk, 2020).

Accordingly, the formation of critical thinking skills and media competence has a positive effect on the level of development of a student or pupil, as well as contributes to a positive

experience of interaction in society. In addition, the availability of such skills in a specialist increases the level of his competitiveness in the labor market and gives certain advantages in the competitive selection of personnel over other candidates.

Multimedia training, the use of information and communication technologies in the educational process, as well as any other phenomenon in the world of political, social, economic nature cannot be solely advantages. On the other side, there are significant influences on human consciousness, factors that cause negative consequences for human health. "The constant use of media technologies promotes Internet addiction, impairs vision, promotes a sedentary lifestyle and complicates the perception of information" (Krutka *et al.*, 2017). Young people are particularly vulnerable to misinformation, manipulation and even hatred through the media, as young people spend a lot of time online and use content-sharing platforms such as Snapchat and YouTube as their main sources of information and communication. In recent decades we can observe the growth of cybercrime among young people, in particular, we are talking about cases of Internet fraud, illegal access to information resources, the use of unlicensed computer programs. Cyberbullying and dissemination of false information are also among the common cybercrimes committed by young people.

Therefore, scientists are actively discussing the best ways to involve media technology in the educational process. Despite the fact that in today's world access to education through the use of media technology may be limited due to lack of electricity, electronic equipment and access to the Internet. The United Nations Sustainable Development Goals stipulate that every child should have free, high-quality primary and secondary education. It is estimated that disruptions in education due to the COVID-19 pandemic have halted progress in education for 20 years. Although all students were affected by the pandemic, the gap between the privileged and those left behind has widened. In India, for example, one study shows that almost 40% of students in less-favored households could not study at all. The situation is similar in other states with low economies. The government estimates that about 30 million students do not have access to smartphones, devices or the Internet to attend school online. Many innovators are already working in communities. UNICEF is working with partners to identify, incubate and scale up promising innovations that help realize every child's right to learning. UNICEF is working with communities, schools and governments to create powerful, innovative education systems that improve learning for all children. Their efforts promote transparency by shedding light on education systems so that students, parents and communities receive the information they need to engage and hold decision-makers at all levels. Therefore, media technologies can create inequalities in access to education. The using media technology is raises significant humanitarian issues. It can be argued that multimedia learning partly creates a situation of inequality for the population of the world's poorer countries, whose population does not have the opportunity to use information and communication technologies in the educational process. It is also a peculiar violation of the human right to equal access to education, which is one of his or her fundamental rights and freedoms. At the same time, the skills of acquiring knowledge, skills and competencies for teachers and students to exercise and defend their democratic rights

and responsibilities on the Internet, as well as to promote and protect human rights, democracy and the rule of law in cyberspace.

There is also the unresolved question of whether the educational process should be fully multimedia, assuming that social pandemic restrictions will soon be lifted in the world. Particular attention is paid to the need to adapt tools using information and communication technologies for learning to the audience. And this adaptation should apply both to virtual communication with the audience and to the face-to-face format of classes.

“The importance of online tools used by teachers is versatile and used as a means of providing feedback to better understand their own strengths and weaknesses in the use of relevant technologies and to find their own ways to succeed” (Shlemkevych, 2020). The issues of transformation of the educational process in accordance with the challenges and requirements of the information society are also relevant for our state. Relevant new realities have become a real challenge for Ukrainian scientists and teachers. Accordingly, critical media literacy is an indispensable skill for both teachers and students. Thus, “the question arose about the formation of soft learning skills that would contribute to the effective assimilation of different types of materials” (Sarkar, 2020). This enables students to acquire relevant functional knowledge and skills related to the scientific processes necessary for the development of science and technology. Particular attention should be paid to the educational process that provides the disciplines of the natural cycle, the study of which involves a certain specificity. “Scientific education aims to find answers to the problems of understanding and interpretation of natural phenomena” (Udu, 2018). This applies to the teaching and learning of disciplines and other cycles, such as the humanities, because the main task of public education is the formation of research skills and access to knowledge about relevant processes. Thus, each child or young person can explore the world empirically, independently studying phenomena and processes with the help of information technology and develop appropriate critical skills.

Training of specialists of the new generation, which is a representative of the digital society, should not only be theoretical, but also include a practical component. Thus, in science education, students are encouraged to acquire and practice scientific skills. Today, the idea of science education is gaining momentum after its formulation by the US National Research Council in the document «Research and National Standards for Science Education» in 2000, the relevant standards were introduced. works in the USA. for STEM educational programs (science, technology, engineering and mathematics). In general, STEM-education is a modern continuation and result of interdisciplinary development of science and natural education, and in the form of STEAM-education, which contains all disciplines of scientific integration and is implemented through inquisitive learning. Thus, students develop strong skills of research and observation, analysis and conclusions. This in the future forms the basis for becoming a successful scientist in any field.

Extracurricular education plays an important role not only in training specialists with the appropriate level of knowledge and a set of relevant competencies, but also in raising a new generation with professional knowledge in the field of information and communication technologies. “In order to effectively implement modern trends in extracurricular education, as modern scientists point out, teachers need to implement innovative teaching methods” (Udu, 2018). “Among scientific innovations, attention is often paid to trends in STEAM education” (Kovalova, 2020). Not only instructors, but also those who provide the learning process, teachers, must have the appropriate multimedia and innovative methods and techniques to support the learning process. It covers a much broader concept, namely the successful combination of creativity and technical knowledge. Australia, China, the United Kingdom, Israel, Korea, Singapore and the United States have a long history of public STEAM education programs.

“In general, innovative educational technologies that can contribute to the development of transformation to spread scientific thinking to broader subjects and the formation of STEAM and innovative skills as key competencies of students” (Kovalova, 2020). Today, the United Nations Educational, Scientific and Cultural Organization (UNESCO) coordinates the implementation and development of the concept of education in the world. “In 1972, UNESCO encouraged the International Council of Scientific Education Associations (ICASE) to disseminate and improve the study of scientific education around the world, and today ICASE is a wide network of scientific associations from teachers, institutions and foundations in more than 75 countries, including Ukraine, which cooperate to promote science in the world” (Udu, 2018). No less important role in this process plays the introduction of the Bologna system of education, which also took place in Ukraine, which increases the level of teaching academic disciplines, the quality of skills, knowledge and abilities received, the transparency of their evaluation, as well as mobility and mobility among teachers, who have the opportunity to train or improve their skills, as well as among students with the opportunity to study, in a foreign country through educational exchange programs and projects.

As a result, innovative practices and technologies are tools that empower both students and teachers. By applying innovative methods, students' needs are met, as this supports students' preferences for practical learning. Innovative practices are promising for teachers because they help teachers engage students in practical requests. Students' use of information and communication technologies can be considered as part of innovative practices. “When teachers and students fully embrace innovative teaching methods, students' academic performance will improve dramatically” (Starenkyi, 2019).

The importance of the media dimension and media education in society has been growing in recent years. Moreover, teachers, community institutions, community organizations, schools and families become involved in the learning process and can contribute to the development of education to achieve the goals of sustainable development. Civil society representatives play an important role in introducing multimedia technology into the educational process. Among them, higher education institutions play a fundamental role in training competent professionals who can work to achieve sustainability. Accordingly,

educational practices are promoted that help students realize the importance of active and responsible citizenship, which responds to the challenges of sustainability of the twenty-first century. “It may be necessary to change the paradigm that meets the needs, aspirations and concerns of students about sustainable development” (Díaz-Iso et.al., 2019).

In our opinion, in this case it is expedient to consider the experience of the Republic of Turkey: which in the context of the formation of information security skills conducts continuous education and training among the people of the country. There are several important regional security initiatives of which Turkey is a member: the Ministry of Defense of South East Europe, the Multinational Peace Force of South East Europe and the Black Sea Naval Cooperation Task Force. “In recent years, a number of events have been held with the participation of the United Nations, namely the United Nations Office for Disarmament Affairs, among which priority is given to human resources training, coaching and training” (Roberts *et al.*, 2019). Over the last 2 years, more than 2,500 students have attended such cybersecurity training programs. Also, with the participation of Turkey, a cyberband laboratory has been set up to improve our curricula and provide more opportunities for action. The laboratory is also useful for measuring the level of knowledge and provides a certification program for visitors (National views and assessments of Turkey, 2019).

Accordingly, the development of media technology in the educational process has had significant consequences for the humanitarian sphere. Wide access to the Internet is one of the factors that has accelerated the introduction of technological innovations in the education sector. Ideas are spreading fast, and people can explore the best ways to use technology in education. Computer equipment manufacturers make devices such as laptops and tablets to meet specific educational needs. Another factor that will accelerate the pace of technological innovation is competition between different technology companies.

The key practical issue in education today, leading to a significant transformation of its established architecture, is how to achieve optimal results with available and possible means and resources.

As a result, as of 2021, it is necessary to form a well-established architecture in the educational process. The starting point of education should be the use of research practices based on scientific methods of cognition, the use of research as teaching methods. Thus, “learning should focus on creating an environment in which students are interested and motivated to conduct research to understand and explain the natural processes of this phenomenon” (Polikhun, 2018). Therefore, in our opinion, innovative activities in science education should be aimed at increasing students' interest and interest in their own research. Accordingly, students should then be introduced to research methods and techniques, as well as skills of observation, introspection and research results.

“Media and education for the future are combined in the educational concept of education for sustainable development, which for several decades aims to enable children, youth and adults to form (sustainable) present and future” (Schluchter, 2021). The end result of such learning should be a new way of thinking of students, when science is seen as a tool, a means of solving practical problems of man, family, city, world, state or on a more global scale.

As a result, the world today is on the path of total informatisation, which accelerates world trends and forms a new type of thinking, and as a consequence, a new type of person. Research on the impact of information technology media on people, in particular on the formation of the worldview of primary school children, remains promising. The issues of developing soft skills in working with information, in the context of combating misinformation and critical thinking, are also becoming relevant.

Consequently, the educational and scientific process began to depend on information technology and communication capabilities. As a result, many controversial issues remain that need to be explored and resolved.

5. Conclusions

As a result of the study we can conclude the relevance of this topic in the world. The development of media technologies and at the same time the increase of relevant risks has proved the necessity to use new approaches in humanitarian education. However, different countries have different approaches to their essence. Accordingly, this is due to both social and humanitarian factors, in particular, one of the most difficult problems for most countries in the world remains the problem of financing the implementation of information and communication technologies in the educational process, as well as the issue of priority of the sphere of education in comparison with other social areas and the needs of society at a particular time.

It is necessary to emphasize the importance strategy development, trainees to develop critical thinking skills during the educational process through the use of elements of media education. Media education creates an informed civic position and forms an independent personality, as well as enables the practice of various dimensions of modern learning. Media education is in close relationship, both with other spheres of public life in one country, such as science and culture, and in close cooperation with the field of education in all states of the world, given the globalization of the world and the new challenges that face the digital society.

It should be noted that for EU countries the pandemic of the coronavirus 2019-2022 was a difficult issue that contributed to the development and use of information and communication technologies. At the same time, it is necessary to define the European integration process, which led to the approximation of Ukrainian legislation and the practice of its application in the field of education to EU standards. The formation of students' skills while working with information technology and the use of elements of

information security is becoming increasingly common in the world. At the same time, there is a growing conflict in approaches to the possibility and scope of information and communication technologies. It should be noted that society have a separate problem in different approaches to regulating this problem within European countries.

Prospects for further research are to determine the characteristics of the impact of media resources on people in the educational process, as well as the need to develop skills of information culture.

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