

The Use of Information and Communication Technologies in Education of Students' Civic Responsibility

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Summary

Building Ukraine as an independent, sovereign state requires the education of a citizen-patriot, able to live and work in a democracy, ensure the unity of Ukraine, feel constant responsibility for themselves, their people, country, seek to make a real contribution to the reform process. Modern modernization of the education system requires the search for new information and communication technologies that can ensure the formation of a citizen with an active civic position, which involves not only students mastering the rights and responsibilities of citizens, convincing them of the feasibility of democratic transformation of society, patriotic qualities and feelings, but also the identification of motivated civic actions. The pandemic and hostilities have led to significant changes in the field of education around the world, they have caused educational problems in Ukraine. At the beginning of the quarantine in the spring of 2020, all educational institutions in the emergency mode switched to distance learning. Intensive use of information and communication technologies in the life of modern society has led to a rethinking of the content of education and training of future professionals: the main role is played not so much by the information itself as the ability to work with it, critically comprehend and produce new knowledge; the main thing is not the amount of information, but its quality; information is needed for further practical application and transformation into knowledge, and the ability to work with information becomes one of the important competencies of the modern specialist in the new transformation of society: from information to the knowledge society. In this context, one of the main forms of training is distance learning, which is able to respond to the challenges of society. The main methodological positions that are taken into account in the construction of the structure and dynamics of the formation of civic responsibility of the individual during the use of information and communication technologies are highlighted. The structure of civil responsibility as a holistic system of information and communication

technologies is outlined, which includes three subsystems that characterize the natural, social and systemic qualities of citizenship, interconnected hierarchically and synergistically. The constituent elements of the structural part of the model of civic culture of the individual are analyzed.

Keywords:

civil responsibility, information and communication technologies, modern modernization of the education system, education of a citizen-patriot, system of educational work, distance learning.

1. Introduction

Crisis political phenomena in Ukraine, obvious contradictions between declared civic values and their neglect, destruction in real life significantly highlighted the need to correlate methodological and theoretical approaches to the formation of patriotic qualities of the citizen.

Today, military-patriotic education acquires special relevance and significance in preparing students for military service. Invariable indicators of military-patriotic upbringing are devotion to the Fatherland, one's people, loyalty to civilian and military duty, physical training, military honor, courage, endurance, devotion, valor, courage, mutual help, etc.

At the same time, young people show apathetic attitude to socio-political processes in society, social and moral degradation associated with the growth of crime, neglect of universal moral values, rejection of spiritual ideals, which indicates the need to strengthen the attention of all state institutions to education civic position of young people, to strengthen their civic responsibility in the system of

educational work, which is possible with the use of information and communication technologies.

Knowledge of certain components of technology allows the teacher to organize the process of patriotic education in educational institutions, using information and communication technologies in the education of civic responsibility of students by correctly selecting the necessary forms and methods of working with the individual, to any changes that can support and respect the culture and traditions that will be passed down from generation to generation [14].

PURPOSE OF THE ARTICLE. To find out the main methodological positions that are taken into account in the construction of the structure and dynamics of the formation of patriotic qualities - as the basis for the education of civic responsibility in the system of educational work using information and communication technologies.

2. Analysis of recent research and publications

I. V. Shcherbak formulates the main purpose of military-patriotic education - the formation and strengthening of student youth of national-patriotic qualities, moral, psychological and physical readiness to defend the Motherland. The most important characteristics of this education are the patriotic orientation of the individual; awareness of personal responsibility for the readiness of the Ukrainian army to protect the state from external encroachments; the desire of students to form in them the necessary military-patriotic competence; psychological readiness for military service [18].

O. Kuchai in his article lights up the conceptual principles of training future teachers by means of multimedia technologies and the use of multimedia technologies in the training of primary school teachers [8; 9].

O. Kuchai, S. Yakovenko, T. Zorochkina, T. Okolnych, I. Demchenko, & T. Kuchai considers the training of specialists in education in the conditions of distance learning. It is lights up the advantages of distance learning and determined the characteristic features of distance learning of students training in the implementation of these technologies in the educational process [7].

Kuzminskyi, A.I., Kuchai, O.V., & Bida, O.A. have determined the content basis of specialist in computer science vocational training which was grounded on the functional approach in the research process [10].

Biletska, O., Kuchai, T., Kravtsova, T., Bidiuk, N., Tretko, V., & Kuchai, O. in their article characterizes the essence of the activity approach in the aspect of learning foreign languages. An analysis of foreign scholars' recommendations on the implementation of the principle of activity approach to learning was made. The essence of teaching in higher educational institutions, that is to help the

teacher to acquire speech competencies for learning foreign languages [3].

3. Research methods

A set of complementary methods was used to solve research problems: system-historical, logical-historical, chronological and diachronic; functional and structural analysis, which includes various subsystems; systematization and generalization of the processed materials for formulation of conclusions, recommendations and definition of ways of the further development of use of information and communication technologies at education of civil responsibility of students.

4. Results

Current modernization of the education system, which led to the emergence of new types of educational institutions, requires the search for new information and communication technologies that can ensure the formation of a citizen with active citizenship, civic responsibility, which involves not only students mastering the rights and responsibilities of citizens, in the expediency of democratic transformations of society, the formation of high moral and volitional, patriotic qualities and feelings, but also the identification of motivated civic actions. In the development of information and communication technologies for the formation of the civic position of students in an educational institution is the relevance of the study [12].

Civic responsibility is determined by the unity of thoughts, feelings and activities, so it is important to take care of the development of emotional, intellectual and practical component of civic culture, so that respect for the laws and symbols of the Motherland, its shrines, understanding of their rights and responsibilities feelings, rights and responsibilities in everyday life.

The effectiveness of the formation of civic responsibility depends on how teachers stimulate the development of self-organization, student self-government, democratic style of interaction; contribute to the formation of critical thinking, creativity and independence, awareness of their own worldviews [14].

Civil responsibility is a reflection of civil society, the civil sphere of public life, civil rights and the status of a citizen; it is a culture of civil society that presupposes the unity of civil rights and responsibilities; a set of spiritual, moral, qualities, value orientations and ideological and psychological characteristics of the individual. Components of civic responsibility are civic education, competence, activity, experience of public activity. The central place is the formation of democratic values, freedoms, civic position in young people, the ability to make their own

objective assessments of various life phenomena and events, people themselves and the meaning of life and thus resist mechanical and expansive imposition of ready-made standards and guidelines. It is also important to educate a conscious and responsible attitude to the rights and responsibilities of citizens in accordance with state legislation [13].

The main methodological positions that are taken into account in the construction of the structure and dynamics of the formation of civic responsibility of the individual are:

- the idea of civic culture of a person as an integral property, an ideal system, which is viewed through the main indicators: structure, system, integrity, functionality;

- the main components of the subsystem of a holistic system of civic culture of the individual operate within a vicious circle in which there are various interdependencies: both single-unique, single-multi-valued, and multi-unique and multi-valued determinations;

- existence in these subsystems of natural, social and systemic qualities, which are at the same time the main indicators of the formation of civic culture as a systemic integral quality; division of social and systemic qualities into qualities of "first" and "second" order;

- hierarchy, interdependence of elements of the integral system of civic culture of the person, imposition and interrelation of separate subsystems in their integral system; performance of natural qualities of the "second order" in the role of social qualities of the "first order" and social qualities of the "second order" in the role of systemic qualities of the "first order";

- internalization of external influences, values, circumstances in the interaction of integral systems and exteriorization of internal components of the system, change of external circumstances under the influence of internal factors;

- the existence of active centers in a holistic system of civic responsibility of the individual, the dominant manifestations in its structure of individual subsystems.

The structure of civil responsibility as a holistic system includes three subsystems that characterize the natural, social and systemic qualities of citizenship, interconnected hierarchically and synergistically. The constituent elements of the structural part of the model of civic culture of the individual (at the level of three subsystems) are:

- the first subsystem of internal value-normative regulation of a person's behavior, the end result of which is the social qualities of the "first order" - civil actions-relations: balance in meeting and forming the basic vital needs of the person; awareness of the norms of civic behavior; formation of civic values and ideals, conscious attitudes of the individual; the adequacy of self-esteem and the level of claims of the individual in accordance with the created public good and the realization in its conditions of the potential of the individual; formation and completeness of functions of the motivational sphere, etc;

- second: civic attitudes of a person (social qualities of the "first order") to the representatives of the native nation and national minorities, universal and national values, rights and responsibilities of the citizen, to the idea of national (state) existence and national ideology, to the homeland and others states, public property and nature of the fatherland, to the affairs of state formation and state loyalty, social groups (families, groups, communities), to civic traditions and rites, to the language and symbols of the state, to citizens, etc. as an opportunity to function as a regulatory system manifests itself through the actual activity of civic behavior and the possibility of developing a set of civic qualities (social qualities of the "second order");

- third: systemic qualities of the "first order" - personality traits (respect for national traditions, friendliness to civic rites, national mentality and spirituality, national identity, preservation of pedigree and family honor, civic duty, national dignity and civic courage, commitment to universal values and local patriotism, state patriotism, civic discipline and civic activism, loyalty and devotion to the nation-building, national monolingualism, etc.) and systemic qualities of the "second order" - its civic orientation (cosmopolitan, patriotic, nationalist).

Civic responsibility of students is interpreted as joint creative activity, interaction of teachers, parents and their pupils, which stimulates the development of students' best civic qualities by providing the necessary conditions for effective functioning of the mechanism of internal value-normative regulation of civic behavior and its inclusion in various civil relations. information and communication technologies in the education of students' civic responsibility. Such a pedagogical process involves the end result (harmonious personal development of citizens, optimization of civic interpersonal interaction) and the means of its implementation (the presence of goals, programs, tools, methods and performers) [5].

The pandemic has led to significant changes in the field of education around the world, it has caused educational problems in Ukraine. At the beginning of the quarantine in the spring of 2020, all educational institutions in the emergency mode switched to distance learning. 60% of higher education institutions reported that COVID-19 has increased virtual mobility and / or online learning as an alternative to the physical mobility of students of the International Association of Universities (2020) [URL: <https://www.iau-aiu.net>]. Substitute services - online courses - are gaining more and more strength. The popularity of educational platforms such as Coursera, edX and FutureLearn has significantly increased [2]. In 2021, 40M new learners signed up for at least one MOOC, compared to 60M (fueled by the pandemic) in 2020 [16].

As noted by scientists [15], over the last decade the number of open educational resources provided by university repositories and project sites has increased

significantly. According to Class Central statistics [16], a free catalog of online courses, in 2021 alone more than 19.5 thousand courses from more than 950 universities were offered (Fig. 1).

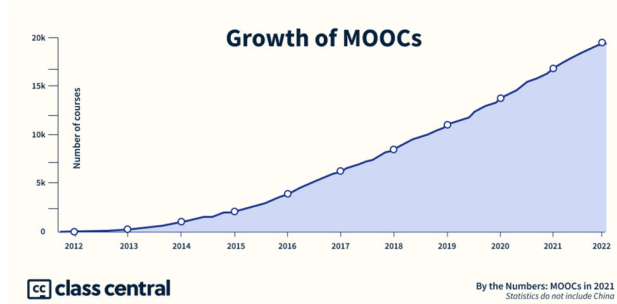


Fig. 1 The dynamics of the number of courses on open educational resources in the study "By The Numbers: MOOCs in 2021" [16]

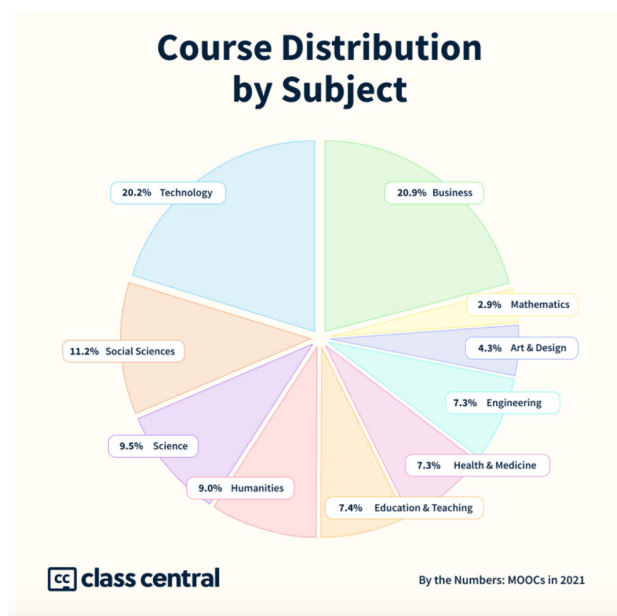


Fig. 2. Distribution of courses by fields of knowledge in the study of Class Central

Subject distribution of courses (Fig. 2) shows the popularity of developers in the fields of "Technology" (about 20%), "Business" (about 21%), "Social Sciences" (about 11%), the least courses created from the fields of "Art and Design" (4%) and "Mathematics" (3%)

Recently, distance learning has a number of undeniable advantages. In particular, a higher education applicant can study at a time convenient to him, in a familiar environment and at a relatively autonomous pace. It is also worth considering the lower cost of such training, as there is no need to rent premises, pay a significant number of staff and save time [19].

The methodological basis for work on the distance form of education requires the maximum involvement of students in active learning, which increases their motivation to carry out professional training by means of distance learning; speed of feedback, constant presence of the teacher, systematic consultations, creation of a special forum for communication between the teacher and students; great interaction between students and students and the teacher, which contributes to the satisfaction of students from learning.

The need to introduce innovative processes in the entire educational space of Ukraine is determined by the challenges of time, civilizational changes of a planetary nature, which consist in rapid, accelerating changes in all spheres of human life, in expanding and deepening globalization and localization processes, in the dangerous orientation of humanity.

The current stage of development of society is characterized by the acceleration of scientific and technological progress, the creation of new high-performance technologies, widespread use of information and communication technologies and these trends in the foreseeable future will increase in both qualitative and quantitative terms. The computer industry is undergoing major changes. Due to the replacement of silicon in the electronics industry with water-carbon materials, the latest processors will be widely used - extremely high-speed with a huge amount of memory. The future also lies in powerful teraflop computers. The educational process will increasingly use various gadgets such as the device "Google Glass", which provide access to educational content anywhere and at any time. The scope of use of cloud technologies will be expanded both in the professional activity of teachers and in the educational activity of pupils and students. Cloud technologies are easy to distribute and update, reliable and cost-effective, provide the ability to create virtual classrooms and provide a large amount of information.

According to V. Afanasyev, information – "a kind of guiding thread that allows people to navigate in a complex maze of social events, to influence them, to put themselves at the service of social and natural forces, to achieve a certain goal" [1]. Professor J. O'Shaughnessy, a professor at Columbia University (USA), is quite accurate: "... information performs the same function in management as headlights for the driver at night. The headlights illuminate the road ahead, but do not eliminate the need to make the right decisions. The information system really affects the planning and organization. It must influence the choice of solution. In addition, because the information needs to be transmitted as intended, it outlines a network of communications, which, in turn, strengthens or weakens the organizational structure. The need for information may determine the need to organize special departments, the

function of which is to provide management with relevant information" [17].

Improving the system of information support in the field of education involves qualitative improvement of information systems in general, but this goal can be achieved only if the scientific principles of information organization. These include the optimal composition of indicators and documents, maximum information, adequacy of documents; speeding up the transfer of information. These and other principles determine ways to improve information management. The main among them are the improvement of the organizational structure of information systems, rationalization, mechanization of information processing.

Intensive use of information and communication technologies in the life of modern society has led to a rethinking of the content of education and training of future professionals: the main role is played not so much by the information itself as the ability to work with it, critically comprehend and produce new knowledge; the main thing is not the amount of information, but its quality; information is needed for further practical application and transformation into knowledge, and the ability to work with information becomes one of the important competencies of the modern specialist in the new transformation of society: from information to the knowledge society. In this context, one of the main forms of training is distance learning, which is able to respond to the challenges of society [11].

The role of the teacher also changes significantly in this educational process. It is entrusted with such functions as coordinating the cognitive process, adjusting the course being studied, advising students when organizing an individual curriculum, managing their educational projects, and so on. It helps students in their professional self-determination, which is more effective to do through the use of information and communication technologies in the education of civic responsibility of students. If we consider the features of distance education in terms of communication between teacher and student, we can identify the following characteristics:

- self-education as a basis for distance learning, which involves the student's own motivation for their own learning, as well as a certain level of self-organization of the individual;
- communication between teacher and student on the principle of "to each other", which corresponds to the form and content of individual counseling;
- communication and interaction "to each other" does not preclude the interaction of "one to many", because the teacher, according to a pre-arranged schedule, works with many students at once. This form of interaction resembles traditional learning in classrooms;
- interaction "many to many" means that it is possible to simultaneously communicate with many students who share experiences and impressions.

Based on this, distance learning has a number of advantages over traditional learning: advanced educational technologies, availability of information sources, individualization of learning, convenient counseling system, democratic relations between student and teacher, convenient schedule and place of work. The introduction of distance technologies in the educational process is aimed at a deeper understanding of the educational material; formation of such competencies as: communicative (direct communication by means of a network), informational (search of information from various sources and possibility of its critical comprehension), self-education (ability to study independently). As practice shows, if a student does not learn to make decisions independently, determine the content of their educational activities and find ways to implement it, he will not be able to master a particular discipline. In addition, distance learning has an educational function - contributes to the formation of leading personality traits: activity, independence, self-improvement, creativity [6].

It should be borne in mind that the central actors of society in the first third of the XXI century will be the current generation "Y" according to the theory of generations of W. Strauss and N. Howe, or as it is called "network generation", "next generation", "web generation" and he will gradually be replaced by the generation of "sons-in-law", ie those who were born in the present period. It is already clear that the representatives of the "Y" generation, and even more so the "Z" generation, who still use various gadgets in the cradle, will not be able to be satisfied with the current forms, methods and means of education. Researchers should study, propagate and implement the latest technologies of education and upbringing of future generations, consistent with the projected challenges of the time [4].

The task of patriotic education of the individual is the formation of his patriotism, in the development, first of all, of the following qualities and properties:

- 1) patriotic feelings (love for their people, language, native nature);
- 2) national dignity, nobility, moral and spiritual education;
- 3) civic consciousness and activity;
- 4) tact and tolerance (national, religious, etc.);
- 5) the need to preserve national spiritual material values;
- 6) readiness for patriotic activity, for feats for the good of the Fatherland;
- 7) patriotic orientation of the individual.

Among the main areas of military-patriotic education of students, according to I. V. Scherbak, should be noted the following: patriotic, moral and psychological, military and legal. The result of educational activities of pedagogical teams of Institutions of Higher Education and self-improvement of students in these areas should be a set of relevant personality formations: patriotic, moral and

psychological, military and legal education, which is achieved through the use of information and communication technologies.

The content of patriotic education at the present stage is revealed as a multifaceted, large-scale and continuous activity, which includes targeted, functional, social, organizational and other aspects, has a high level of systemicity, covers all generations, permeates to some extent all aspects of life: spiritual and moral, socio-economic, informational, legal, psychological-pedagogical, military-political.

The main characteristics of the content of patriotism are the understanding and perception of the national idea; promoting the development of the country's statehood, its independence; mastery and development of language, culture; military and patriotic education; love and care for the native land; respect for history, folk traditions, folklore; love for native nature. Patriotic feelings are especially aggravated, the importance of patriotism grows when the Motherland is threatened by certain negative circumstances in the form of deviation of historical development from the norm: natural disasters, crises, revolutions, wars, etc. [18].

Modernization of the education system requires the search for the use of information and communication technologies in the education of civic responsibility of students who can ensure the formation of a citizen with an active patriotic position, civic responsibility which involves not only students' knowledge of rights and responsibilities, society, the formation of high moral and volitional, patriotic qualities and feelings, but also the identification of motivated civic actions, actions [12].

Civic responsibility is determined by the unity of thoughts, feelings and activities, so it is important to take care of the development of emotional, intellectual and practical component of civic culture, so that respect for the laws and symbols of the Motherland, its shrines, understanding of their rights and responsibilities feelings, rights and responsibilities in everyday life. The effectiveness of the formation of civic responsibility depends on how teachers stimulate the development of self-organization, student self-government, democratic style of interaction; contribute to the formation of critical thinking, creativity and independence, awareness of their own worldviews of the use of information and communication technologies, in the education of civic responsibility of students [14].

Civil responsibility is a reflection of civil society, the civil sphere of public life, civil rights and the status of a citizen; it is a culture of civil society that presupposes the unity of civil rights and responsibilities; a set of spiritual, moral, qualities, value orientations and ideological and psychological characteristics of the individual. Components of civic responsibility are patriotic orientation, civic education, competence, activity, experience of public activity. The central place is the formation of democratic

values, freedoms, civic position in young people, the ability to make their own objective assessments of various life phenomena and events, people themselves and the meaning of life and thus resist mechanical and expansive imposition of ready-made standards and guidelines. It is also important to educate a conscious and responsible attitude to the rights and responsibilities of citizens in accordance with state legislation [13].

Conclusions

Modern modernization of the education system requires the search for the use of information and communication technologies in the education of civic responsibility of students who are able to ensure the formation of a citizen with active citizenship, which involves not only students' knowledge of the rights and responsibilities of citizens. formation of high moral and volitional, patriotic qualities and feelings, but also the identification of motivated civic actions.

Prospects for further intelligence investigation

Develop and implement in the educational process an educational and methodological complex, which should include manuals that will promote patriotic education in the use of information and communication technologies in the system of educational work of students.

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