Development of Information Policy of Ukraine under Martial Law

Tetyana Oleksiyuk^{1,*}, Olena Ptashchenko², Viktor Krasnoshchok³, Dymytrii Grytsyshen⁴ and Larysa Sergiienko⁵

¹Interregional Academy of Personnel Management, Ukraine, 03039 Kyiv, Frometivska str., 2, Ukraine.

²D.Sc. (Economics), Professor, Professor of the Department of Entrepreneurship and Trade, West Ukrainian National University, Ternopil, Ukraine.

³Associate Professor of the department of applied information systems, Candidate of technical Science, Taras Shevchenko National Universiti of Kyiv, Faculty of Information Technology, Department of applied Information Systems, Ukraine.

⁴Vice-rector for scientific and pedagogical work and innovation, Doctor of Sciences in Public Administration, Doctor of Economic Sciences, Professor, Zhytomyr Polytechnic State University, Ukraine.

⁵Dean of the Faculty of National Security, Law and International Relations, Doctor of Science in Public Administration, Associate Professor, Zhytomyr Polytechnic State University, Ukraine.

Abstract: The research focuses on the information policy of Ukraine, which is transforming and acquiring new features due to the adoption of martial law. Scientific and practical research on the information security of Ukraine under martial law is very important. Also important to consider is the pedagogical and educational aspect of training specialists in the field of law and media communications, who must have relevant competencies in the information policy of the state under martial law. This is what determines the relevance of the scientific issues of the study. The research aims to determine the impact of studying information policy transformations under martial law on the formation of a competent young specialist and to assess the feasibility of including such topics in students' courses. The research methodology is based on an integrated approach that includes a pedagogical experiment, statistical methods, observation methods, and descriptive methods for theoretical research. A comparative analysis of individual legal acts was also used for the comparative analysis of individual legal acts. The hypothesis is that the inclusion of the topic of information policy development under martial law in the process of training specialists in the field of law and media communications is a prerequisite for the formation of highly qualified specialists. The results of the study confirmed this hypothesis. Students positively evaluated the inclusion of martial law and Ukraine's information policy in the content of their courses, its changes, and prospects. In the future, it is worth paying attention to new content areas and topics related to government policy in Ukraine under martial law and considering the possibility of introducing innovative approaches to the training of young professionals.

Keywords: Government policy, Higher education pedagogy, Information policy, Information security, Martial law.

1. INTRODUCTION

The problems of forming and regulating a unified information field in the space of Ukraine under martial law are the subject of contemporary research in the field of Ukrainian education, political science, philosophy, law, social communications, etc. (Mezepa, 2022; Melnyk et al, 2019). The value of this type of research lies precisely in considering the problematic positions of the functioning of political power under martial law and the creation of new mechanisms for the distribution of state power.

It is common knowledge that the effectiveness of governments in wartime is based on a proper communication policy and balanced information provision. This aspect should be the focus of attention of both researchers and practitioners teaching disciplines related to state information policy.

The successful functioning of political structures, the development of political consciousness, and the interaction between the army, citizens, and the government depend on the nature and methods of providing information, as well as its nature. To achieve these goals, it is necessary to look for means of effective communication and positive information and communication influences on the formation of the image of the state authorities and leaders, as well as the formation of positive perceptions in the minds of citizens. In addition, it is important to ensure the economic and energy efficiency of communication processes. Information technologies can play an important role in this regard, but they require moderate approaches and new solutions. Such experience should be included in the structure of academic disciplines so that future specialists have the opportunity to familiarize themselves with working in crises.

^{*}Address correspondence to this author at the Interregional Academy of Personnel Management, Ukraine, 03039 Kyiv, Frometivska str., 2, Ukraine; E-mail: tetyana.oleksiyuk@gmail.com

Many studies examine the peculiarities of information security under martial law. The authors consider the norms of the formation of a single information space as the core of the current policy of the Ukrainian government in this area (Bjelay, Kornijenko, 2018). This is primarily about establishing how harmonious the development of information services, resources, and media products is. An important substantive component of the consideration of information policy in Ukraine under martial law is also to increase counteraction to hostile information influences, work on effective information security, and study the impact of military aggression on government policy in Ukraine.

In general, the interest in Ukraine, and its legal and social realities in the world of science is growing. This concerns the study of the prospects for the development of society, the impact on information policy, ways to counteract information wars, and security and regulatory issues - all in the context of living in an information society in Ukraine. Among the manifestations of aggression against Ukraine are the occupation of the Crimean Peninsula in 2014 and the crash of the Malaysian Airlines plane over the territory of Ukraine in July 2014. All these events were considered from the perspective of international law and became an important signal of the need to change information policy. National security policy, which was built in the context of the Cold War, needed to be changed (Moroz, 2021). Some studies have formulated some recommendations for such changes, including the formation of a single information space, the need for constant coverage of such issues as international terrorism at the state level, organized crime, illegal arms trafficking, private armies and increased drug trafficking, religious fanaticism, and separatism propaganda. Racial and gender discrimination are also critical issues (Klimova, Maltsev, 2017). From this perspective, information technologies are extremely influential and require special and close attention, as manipulations at the level of social communications can worsen international cooperation and the formation of the world community.

The conditions of martial law are related to the course of political processes in Ukraine, Europe, and the whole world, so it is promising not only to conduct research on changes in Ukraine's information policy but also to inform about these changes at the educational level of those industries that are directly related to such activities. Experiments with the use of new principles of implementing the government's information policy will allow training specialists who are ready to work under martial law in Ukraine.

2. RESEARCH AIMS

The research aims to determine the impact of studying information policy transformations under martial law on the formation of a modern young specialist and to determine the students' assessment of the feasibility of including such topics in educational courses.

To achieve this goal, the following objectives should be fulfilled:

 to establish the main components of the educational and pedagogical role of studying information policy under martial law to determine the assessment of students and its changes regarding the effectiveness of content innovations in the system of specialty disciplines.

3. LITERATURE REVIEW

The specifics of information policy and information security are regulated by a series of laws of Ukraine (Law of Ukraine of June 21, 2018, \mathbb{N} 2469-VIII; Law of Ukraine dated February 4, 1998, \mathbb{N} 75/98-VR; Decree of the President of Ukraine of May 26, 2015, \mathbb{N} 287/2015; Law of Ukraine of January 09, 2007, \mathbb{N} 537-V.). In connection with the implementation of the National Security Strategy until 2021, the National Security and Defense Council of Ukraine authorized the creation of a new body - the National Coordination Center for Security and Defense. It is responsible, in particular, for the security aspects of information policy implementation. Other bodies involved in information policy include the National Council on Television and Radio Broadcasting, the State Film Agency, the State Service for Special Communications and Information Protection, etc.

Studies of the quality of the educational process and the factors that influence the quality of training have both a theoretical basis (Guerrero et al., 2019) and practical implementation (Etzkowitz, 2019). Studies have shown that high efficiency of knowledge requires taking into account the human component and the value of education itself (O'Sullivan, 2017). This is embedded in the activities of higher education institutions at the level of training and offering an educational product, as well as in the process itself (Khalil, 2021).

Researchers argue (Levinska, 2017; Trubavina et al., 2022) that an educational product should provide constant attention to the relevance and practical usefulness of the skills and abilities acquired by the student, as well as how important they are for students. Moreover, the educational process should consider the new experience gained by students in the course of their studies.

Modern pedagogical science considers the impact of the quality of educational services and students' positive assessment of these services on the image and success of the university (Chaudhary, Dey, 2021); an algorithm for actively introducing innovations and responding quickly to market needs in entrepreneurial universities at the regional, national and global levels (Čuhlová, 2019). Moreover, the significant role of student motivation in increasing the level of loyalty and value in the labor market related to the relevance of educational services, as well as the prospects for increasing student motivation and loyalty in connection with improving the quality of educational services are studied (Subrahmanyam, 2017). Furthermore, the problem of ensuring the information security of Ukraine under martial law, which was introduced by the Decree of the President of Ukraine on February 24, 2022, is being examined (Savchenko, 2022).

The study of information policy in Ukraine is becoming the subject of comprehensive research.

4. METHODS

To achieve the goals of the research team, a project was introduced and implemented at a national university (Yuriy Fedkovych Chernivtsi National University, Ukraine). The experiment involved students studying at the Faculty of Law at the first (bachelor's) level of education.

The data was collected during the 2022/2023 academic year (1st semester: September to January). All participants of the experiment are freshmen (42 people), and this course is supposed to teach some disciplines: "Human Rights" and "History of Law". All participants in the experiment voluntarily agreed to participate in the research project. All respondents were guaranteed privacy, which was documented. Moreover, permission to collect data was obtained from the university administration.

All the teachers who worked in the research program expressed interest in participating in the experiment, improving their pedagogical skills, and enhancing the quality and relevance of the course. All teachers are regular participants in internship and professional development programs and have non-formal education diplomas.

The study of the relevance of teaching some disciplines related to Ukraine's information policy under martial law, or rather pedagogical and educational effectiveness, is based on a comprehensive approach.

The pedagogical experiment consisted of 3 stages, during which the data for the study presented in the article were obtained.

In the first stage (initial), some topics were selected and systematized for modules, modules on the topics of training courses, and teaching materials that use the topics of Ukraine's information policy and its changes in the context of the military conflict.

A preliminary survey of students who participated in the experiment was conducted. The research team worked on a work plan and a syllabus for the disciplines "Human Rights" and "History of Law", which included the active use of information policy and information security in the context of martial law.

The second stage involved an active learning process within the disciplines of Human Rights and the History of Law. At this stage, all students were divided into groups (G1 – 15 people, G2 – 15 people, G3 – 12 people). Preliminary testing of participants on the level of awareness of the basic concepts of information policy was conducted at this stage. This determined their readiness to work with this topic and their positive attitude to the consideration of government information policy and media in the educational process. With this in mind, the teachers and the research team worked on changes to the syllabus, which included work with the regulatory framework, changes in legislation, court cases, and information attacks, as well as the preparation of new materials for the course.

The third stage (final) involved conducting final surveys of students on their assessment of the use of information policy topics and their readiness to work with these topics.

Among the disadvantages of the described approach are the following: the impossibility of conducting an in-depth qualitative study that could reveal the changes that took place during the experiment and in the short time in which the experiment lasted.

5. RESULTS

The study focuses on the main vectors of the development of Ukraine's information policy under martial law. This is an important part of the modern educational process of training specialists in law, media communications, political science, etc.

At the preparatory (first stage) stage of the pedagogical project, the positive aspects of the practice of introducing the topic of information policy in Ukraine into 2 courses in the 1st year of the first (bachelor's) level were analyzed. The pedagogical and educational aspect of studying the realities of information policy in modern Ukraine was used to introduce new information into the educational process. Links to materials on the topic were used in the manuals for practitioners, which is an important method of supporting the successful training of future specialists.

First of all, students were able to actively interact with the teacher and colleagues, studying in a group and working with the regulatory framework and court decisions on changes in information policy. This made it much easier to organize students' joint work on a common topic.

Studying security information guidelines as a component of information policy in wartime should be an additional motivation to study. Frequently, monotonous, outdated, and irrelevant materials can generate apathy and unwillingness to learn while studying the realities of information policy and security can be useful, interesting, and relevant.

At the beginning of the experiment (stage I), planning, organization of training, control, and constant coordination of the content components of academic disciplines was introduced, which had a positive impact on the attitude of respondents to the proposed changes. This can be seen in the monitoring of learning outcomes. The entire research plan was divided into stages and involved significant use of new materials and interactive learning tools.

At this stage, the research team and the teachers selected educational material with the necessary explanations and interpretations for students on complex grammar topics, such as the use of verb forms, prepositions, articles, complementary forms, etc. The video was used not only as entertainment but also as illustrative and educational material for teaching English grammar topics. Further, the participants were pre-tested on their level of English grammar proficiency.

In the second stage of the experiment, the active use of video content was introduced into the training practice, which was also explained with comments, repetitions of difficult places, and clarifications. This stage also included pre-testing to find out the respondents' attitudes toward using video content. The question "Is it important for you to study the development of information policy?" had several answers, and the results are presented in percentages.

As can be seen from the survey results, students are generally positive about the modernization of academic disciplines with the topic of information policy development. In Groups 2 and 3, the number of favorable responses is higher, although the difference is not significant. There is a significant

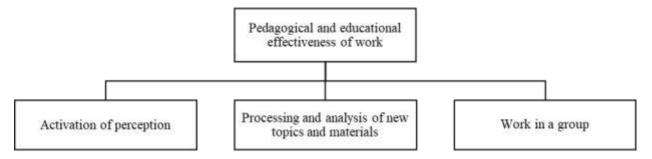


Fig. (1). The main components of the effectiveness of pedagogical and educational work.

Source: author's development.

number of students who could not prioritize or disapprove of the innovation - 37% of respondents.

Table 1. Second stage. Students' assessment of the involvement of topics (modules) on information policy in Ukraine in academic disciplines.

Group	Yes	No	I don't know	
G1	65%	14%	21%	
G2	64%	16%	20%	
G3	62%	27%	11%	

Source: author's development.

At the final stage of the project, the results of the surveys were shown, which made it possible to determine how students' assessment of the use of new topical topics on Ukraine's information policy has changed. The answers at the beginning and end of the experiment were considered and compared.

Table 2. Stage II. Students' assessment of the involvement of topics (modules) on information policy in Ukraine in academic disciplines.

Group	Yes	No	I don't know	
G1	74%	10%	16%	
G2	75%	14%	16%	
G3	73%	17%	10%	

Source: author's development.

In the second stage, students assessed the need to use new and relevant materials on changes in information policy in the educational process to improve the quality of education. The largest number of answers was "yes" (8% more than in the first stage), but 26% of respondents expressed uncertainty or unwillingness to read more about information policy guidelines. At the final stage of the survey, students showed an increase in the level of approval of the innovative practice of using up-to-date materials in education in all study groups.

In the final stage, a survey was conducted among students to determine their interest in the topic of information policy in Ukraine under martial law. The respondents were asked to note the positive aspects of using this topic in the educational process that they consider useful.

Table 3. Survey on the relevance of new topics in the education	on-
al process.	

Торіс		G2	G3
Labor service under martial law in the media		36%	49%
Informing about the use of private sector busi- ness resources		30%	29%
Conditions and guidelines for the introduction of curfews and notification of changes		70%	72%
Restrictions on civil liberties		80%	81%
Control of business activities		58%	59%
Logistical constraints and control		58%	66%
Housing obligation		50%	48%
Improving the regulatory framework for infor- mation policy		74%	67%

Source: author's development.

According to the survey, a total of 82% of the students who participated in the experiment consider the topic "Restrictions on civil liberties and their interpretation within the framework of information policy" to be important and useful. The majority of respondents (71% in total) want to study and adjust the conditions and guidelines for the introduction of curfews from an information perspective.

6. DISCUSSION

The question of the place and role of information policy is related to the pedagogical and educational effectiveness of such practice. This aspect has been studied concerning the guidelines for teacher training in the context of the introduction of a competency-based approach in the higher education system of Ukraine (Bilal et al., 2019; Mezepa, 2022; Trubavina et al., 2022). These studies examine the peculiarities of the teacher's activity and give recommendations on the content of courses following peacetime standards. In the current situation in Ukrainian university education, it is worth paying attention to those topics whose content is changing significantly, as they are necessary for working in the profession under martial law. However, one cannot but agree with the statement that even in crisis conditions, a teacher should remain an educational manager who is guided by European approaches to education.

The topic of gender approaches and their transformations in wartime requires further consideration. According to a study (Prykhodko et al., 2020), 74% of female students at Ukrainian military universities chose the military profession for selfrealization. The increased attention to the topic of information policy in Ukraine is also related to the possibility of self-realization and professional development under martial law. According to our research, 74% of respondents are relatively positive about innovations in the content of information policy and information security-related disciplines.

Important for analyzing changes in information policy during wartime are theoretical works that interpret, compare, and analyze the regulatory framework and court decisions related to the activities of government information policy and media in Ukraine (Mezepa, 2022; Moroz, 2021). It makes it possible to fill academic disciplines with relevant information obtained in recent research by experts in law, political science, philosophy, and social communications.

In the future, work should continue finding effective models for implementing innovations in higher education and defining guidelines for the development of Ukraine's information policy in wartime.

7. CONCLUSION

The study shows that due to the changes in the country's information policy, the introduction of the modern training process in Ukraine requires a prompt response. Especially in the context of Ukraine's martial law, it is important to ensure knowledge and understanding of the main positions on the protection of the national information space, the principles of information policy, and the national information security system of Ukraine. The study showed that the following issues are important for students: work to improve the legal framework for information policy in Ukraine (71%); organization and guidelines for informing about the introduction of curfews (74%); and the issue of restrictions on civil liberties under martial law (82%), including the specifics of their coverage in the public space. Furthermore, it is essential to work on the creation of a regulatory framework that would adjust the interaction between government agencies, media, and public institutions to ensure the harmonious development of Ukraine's information policy.

REFERENCES

- Bilal, A., Ghayyur, S., Kanwa, L., Nazir, Z., Ruba, I., (2019) Motivation in the selection of open source software license: an economic and social perspective. *Journal of Theoretical and Applied Information Technology*, 97(24), pp. 3868-3878.
- Bjelay, S., Kornijenko, D. (2018). Information security today is an integral part of military security. Actual problems of state information security management. National Academy of the Security Service of Ukraine. Kyiv. P. 408.
- Chaudhary, S., Dey, A. (2021). Influence of student-perceived service quality on sustainability practices of the university and student satisfac-

tion, Quality Assurance in Education, 29(1), 29-40. https://doi.org/10.1108/QAE-10-2019-0107

Čuhlová, R. (2019). Intercultural Adaptation Process and Its Determinants. International Journal of Economics, Finance, and Management Sciences, 7(6), 215-221. https:// doi: http://www.sciencepublishinggroup.com/journal/paperinfo?journali

d=173&doi=10.11648/j.ijefm.20190706.16 Decree of the President of Ukraine of May 26, 2015, № 287/2015.

- http://zakon. rada.gov.ua/laws/show/287/2015#n14
- Etzkowitz, H., Germain-Alamartine, E., Keel, J., Kumar, C., Smith, K., Albats, E. (2019). Entrepreneurial university dynamics: structured ambivalence, relative deprivation and institution-formation in the Stanford innovation system. *Technological Forecasting and Social Change*, 141, pp. 159-171.

https://doi.org/10.1016/j.techfore.2018.10.019

- Guerrero, M., Herrera, F., Urbano, D. (2019). Strategic knowledge management within subsidised entrepreneurial university-industry partnerships. *Management Decision*, 57(12), pp. 3280-3300. https://doi.org/10.1108/MD-10-2018-1126
- Khalil, M. (2021). Responsiveness to quality assurance implementation: an institutional theory perspective, *Quality Assurance in Education*, vol. 29, no. 1, pp. 41-52. https://doi.org/10.1108/QAE-06-2020-0074
- Klimova, N., & Maltsev, A. (2017). On the path to gender equality. Warrior. http://nangu.edu.ua/wp-

content/uploads/2019/01/32_sayt_s_popravkoy-8-8.pdf

- Levinska, Z. (2017). Volunteer Motion as a Manifestation of Civic and Political Activity during the Crisis Modern Ukraine: Gender Aspects. Scientific Journal of the Dragomanov National Pedagogical University, 22, pp. 96-102.
- Melnyk, Y. B., Prykhodko, I. I., & Stadnik, A. V. (2019). Medicalpsychological support of specialists' professional activity in extreme conditions. *Minerva Psichiatrica*, 60(4), pp. 158-168. https://doi.org/10.23736/S0391-1772.19.02025-9
- Mezepa, S. O. (2022). Information security in conditions of war. 2022: Russian-Ukrainian war: law, security, the world (April 29-30, 2022). http:// confuf.wunu.edu.ua/index.php/confuf/article/ view/942
- Moroz, V. (2021). Features of information security in martial law. Scientific Works of National Aviation University. Series: Law Journal "Air and Space Law", 2(59), pp. 94-101. https://doi.org/10.18372/2307-9061.59.15600
- O'Sullivan, D. (2017). Evolution of internal quality assurance at one university – a case study, *Quality Assurance in Education*, 25(2), pp. 189-205. https://doi.org/10.1108/QAE-03-2016-0011
- On national security of Ukraine: Law of Ukraine of June 21, 2018, № 2469-VIII. http://zakon.rada.gov.ua/laws/show/2469-19#n355.
- On the Concept of the National Informatization Program: Law of Ukraine dated February 4, 1998, № 75/98-VR. http://zakon.rada.gov.ua/laws/
- On the State Policy Strategy for Promoting the Development of Civil Society in Ukraine and Priority Measures for Its Implementation Licensing: Decree of the President of Ukraine of May 26, 2015, № 287/2015. http://zakon. rada.gov.ua/laws/ show/287/2015#n14.
- Principles for the Development of the Information Society in Ukraine for 2007-2015: Law of Ukraine of January 09, 2007, № 537-V. https://cis-legisla-

tion.com/document.fwx?rgn=18178#:~:text=Law%20of%20Ukrain %200f%20January%209%2C%202007%20No.,information%20s ociety%20in%20Ukraine%20for%202007%20-%202015

- Prykhodko, I., Yurieva, N., Timchenko, O., Fomenko, K., Kernickyi, O., Tovma, M., Kostikova, I. (2020). What Motivates Ukrainian Women to Choose a Military Service in Warfare? *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 11(3), pp. 36-53. https://doi.org/10.18662/brain/11.3/108
- Savchenko, V. (2022). Peculiarities of information security guarantees of Ukraine under martial law. European perspectives. 4, pp. 84-89. https://doi.org/10.32782/EP.2022.4.12
- Subrahmanyam, A. (2017). Relationship between service quality, satisfaction, motivation, and loyalty: A multi-dimensional perspective, *Quality Assurance in Education*, 25(2), pp. 171-188. https://doi.org/10.1108/QAE-04-2013-0016

Development of Information Policy of Ukraine under Martial Law

Trubavina, I., Karaman, O., Kamenova, D., Stepanenko, V., & Yurkiv, Ya. (2021). Research on the transformation of social well-being and life

Received: September 20, 2023

Revised: September 26, 2023

Accepted: Nov 03, 2023

Copyright © 2023– All Rights Reserved This is an open-access article. attitudes in students from the occupied territories and the demarca-

tion line at relocated higher education institutions from the East of

Ukraine. SHS WebConf. Second International Conference on His-

tory, Theory and Methodology of Learning (ICHTML), 104, pp. 1-

12. https://doi.org/10.1051/shsconf/202110403010