Cultivating media literacy culture as a measure of societal awareness during crisis

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Abstract The paper considers media literacy as a key skill that a person of the XXI century should possess for quality education and further professional activity. Consideration of ways to develop media literacy in a crisis situation, the evolution of media literacy culture in society is one of the most relevant areas of research in the modern humanitarian paradigm. Introducing the principles of media literacy in a state of crisis requires careful planning, the proper attitude to the audience, and the motivation of all participants in the educational process. Practical developments and projects that can contribute to raising the level of media literacy and the culture of media education are relevant in modern education in Ukraine. The purpose of the research is to establish an algorithm for introducing media literacy, its effectiveness and influence on learning outcomes and education quality, implemented in crisis conditions. Furthermore, participants in the educational process evaluate media education as a civilizational skill and technology. The methodology of the present research is characterized by a comprehensive approach. First and foremost, it is a method of pedagogical experimentation, interviewing and observation. The possible benefits of the descriptive technique, synthesis, and analysis were used for the theoretical study. The hypothesis lies in the fact that a high level of media education culture is positively assessed in a society in a crisis situation; media literacy is a convenient and effective skill that is a necessary component of the modern world. For students of pedagogical specialties in the field of social communications, the result of the educational experiment should be the formation of the culture’s fundamentals of introducing media literacy in crisis conditions. In the long-term, it is worth working on practical projects aimed at increasing the culture of media literacy development and the impact of this skill on the quality of education and professional growth.

Keywords: media education, media literacy, social consciousness, media skills, media tools, inclusive culture

1. Introduction

Using technologies to acquire media literacy skills is a relevant topic for global organizations and modern pedagogical thought in general. It is considered one of the main skills in many studies (Bakieva and Teshabaeva, 2019; Boelens et al. 2017), and it is specified in the strategies of civilization development (Chernenko, 2019). New digital media, rapid changes in information and communication technologies have a significant impact on the life of every society. The development of such technologies significantly changes the laws of quality education and labor, influencing society and international communication. This is precisely why the demand for media literate specialists is constantly growing, and employers are interested in successful and highly qualified professionals who are able to act flexibly and competently in a fast-paced environment.

Media education, for which media literacy is an essential component, helps recognize the ways in which the media influences consciousness, and provides practical skills in analyzing and evaluating information received in the media. Media literacy is an indicator of critical thinking skills and the ability to navigate the media space. Media literacy is also aimed at improving the culture of media consumption. For this reason, media literacy is an integral component of society development, declared by UNESCO as a duty and right of the consumer of information products (as defined by UNESCO in the UNESCO Paris Declaration on Media and Information Literacy in the Digital Age (May 28, 2014)), as part of the rights to expression and information and as belonging to the fundamental human rights and freedoms (Chernenko, 2019).
Sweden is the homeland of one of the top methods for media literacy. Approximately 85% of Sweden’s 9.4 million citizens use the Internet. More than 97% of the Swedish citizens aged 12 to 44 are regular Internet users. Sweden placed the fourth place in the 2023 Reporters without Borders annual worldwide ranking, which emphasizes the degree of freedom gained by journalists and news organizations as well as the measures taken by governments to uphold such freedom (Reporters without Borders, 2023).

Media education in Sweden started in the 60s. In the XX century, at the initiative of the Association of Swedish Newspapers (for instance, Tidningen i Skolan), a training resource Mediekompass was established, dedicated to media education. The educational platform Mediekompass, dealing with media education in Swedish schools, has been activated since 2011. Currently, Mediekompass works with 50 leading Swedish publications, and these media are convinced that readers should be able to work with information from the very beginning of their school days (Mediekompass). In 2018, the Internet Foundation of Sweden (IIS) (Källkritik På Internet., 2018), the Swedish Institute with the help of the “Metro” newspaper (Viralgranskaren) established a Media Literacy Curriculum, which was introduced in school education in the same year.

Practice-oriented media literacy methods and techniques introduced in Ukraine are a significant component of creating a modern society that is ready to resist information injections in the context of warfare. The concept of introducing media education in Ukraine was presented in a resolution of the Presidium of the National Academy of Pedagogical Sciences of Ukraine in 2010, and it was updated in 2016. Since the first experimental stage of introducing media education into Ukrainian reality was successfully accomplished in 2016, it is necessary for the “gradual rooting of media education and standardization of its requirements” by 2021. Consequently, the scientific issue of media literacy as one of the essential components of a successful society is relevant nowadays.

In the context of teaching media literacy, the breadth and comprehensiveness of using the Internet in Ukraine should be taken into account. Therefore, there is a need to develop educational projects teaching how to work with and analyze any information resource. Otherwise, it will be impossible to respond properly to the social challenges posed by the war to the citizens and the government.

The purpose of the research was to determine the effectiveness of using technology of enhancing the culture of media literacy in the conditions of war in the process of training students of pedagogical specialties and social communications, as well as the influence of a high level of media literacy on the students’ academic performance.

The purpose of the academic paper involves solving the following research problems:
− to determine the impact of media literacy on the performance and attendance of students of pedagogical specialties;
− to determine how positively the participants of the educational process evaluate the introduction of the media education course and are interested in further work in this area;
− to monitor the students’ attendance level in the discipline “Fundamentals of Media Literacy”.

2. Materials and Methods

The introduction of a pedagogical experiment involves a comprehensive approach to the research methodology. The educational experiment method is used as the primary method in the research. Static methods and the method of observation are also significant components, and the descriptive method is used to deal with theoretical material.

The study was conducted experimentally in the 2022/2023 academic year, during 1 semester, from August to January. The experiment involved 60 students of Hryhorii Skovoroda Kharkiv National Pedagogical University, who were studying in the 2nd year of the first (bachelor’s) level of education in pedagogical specialties (specialty 014 “Secondary Education. Language and Literature (English)”; specialty 052 “Political Science”).

All students who agreed to participate in the research project were divided into 4 groups (each group consisting of 15 people). 2 groups were established as experimental (EG1 was enrolled in the specialty 014 “Secondary Education. Language and Literature (English)”; EG2 represented students majoring in specialty 052 “Political Science”). The discipline “Fundamentals of Media Literacy” was introduced in these groups, and they actively engaged in media education and war-related crisis-related themes.

For 2 control groups (CG1 represented the specialty 014 “Secondary Education. Language and Literature (English)”, CG2 represented the specialty 052 “Political Science”), the curriculum did not provide for a separate course “Fundamentals of Media Literacy”; the knowledge in this area was presented as separate topics within other disciplines. The entire experiment was conducted in accordance with the established training regime and guidelines, as well as security measures in war conditions.

The pedagogical experiment involved the implementation of the project in three stages. At the first stage, consultations were held with teachers who agreed to participate in the research. Educational materials were collected, materials were created on educational platforms adapted to the conditions of obtaining education in Ukraine in the context of martial law, and the necessary material and technical base was prepared (Honcharenko et al., 2022).

At the second stage and at the end of the experiment, the level of knowledge of the students-respondents was measured (the overall average score of students’ learning outcomes was determined according to the 100-point system). Along with this, at the end of the project (stage III), a survey was organized for EG1 and EG2, which collected students’ responses.
about their attitudes toward blended learning technologies and the feasibility of continuing them. By the way, students’ attendance in all study groups was constantly monitored throughout all stages of the experiment.

At the third stage, the final analysis of the results was carried out. The data were processed in such a way that they could be presented as a basis for determining the level of efficiency of the implemented technology, and as an answer to the research issues. The experiment results are presented in the form of a description of statistics, taking into account the survey data.

The destabilizing factors that could have influenced the results of the experiment were the active military operations that sometimes took place in the city of Kharkiv and Kharkiv region (the locations where the pedagogical experiment was conducted).

All respondents took part in the experiment voluntarily. The research team guaranteed anonymity to the participants, and that the personal information obtained in the course of the research will not be made public by the research team.

3. Literature review

Information and media literacy is based on the principles of life-long learning. This is a general competence that is a social indicator and, under the conditions of the information revolution, enables a citizen to be an equal participant in democratic processes. For this reason, media literacy is the subject of research in many humanitarian works (Allcott and Gentzkow, 2017). It is vital to be a media literate person in a time of crisis. A citizen should be informed and educated. A media literate person is a proactive participant in democracy building, able to make a positive contribution to social development, participate in resistance to violence, and make the relevant decisions in a crisis situation (Vajzović, 2021; Bakhov et al., 2021).

Examining the effectiveness of media education platforms, measuring the general level of media literacy, and identifying the various issues connected to low levels of media education are some of the research issues (Vajzović, 2020; Lessenski, 2021). In the age of high technology and artificial intelligence, challenges, problematic positions and governments’ mistakes are identified causing a low level of media education and information literacy (Hasanagić et al., 2020). The problem of information disorder, the chaotic landscape of digital media as a symptom of social problems, and political disorder that can lead to conflict is also considered (Cvjetićanin et al., 2019; Karaduz et al., 2022; Akimov et al., 2020). Ways are being sought to improve the culture of media education and to avoid the impact of information wars on society development (Ivanova et al., 2020). Several scientific works consider pedagogical technologies for improving media literacy and ways to use such technologies in different education systems in an integrated manner (Broadbent, 2017; Kuzior et al., 2023). There are studies in which media education is presented as one of the basic and vital for modern education.

The concept of media literacy is also actively discussed in modern pedagogy (Geng et al., 2019; Kryshtanovych et al., 2022). Recently, special attention has been paid to working with media literacy in crisis and martial law conditions.

Pedagogy has already possessed a number of successful examples of media literacy based on the practice of introducing the principles of critical thinking (Lowrey, 2017). Media education is a necessary component in the training of future teachers, specialists in social communications and pedagogy, and management. It also requires the application of interactive teaching methods (Synorub, 2019). These tendencies have especially intensified in the context of military operations, where the situation dictated the need to introduce blended technologies.

International programs and governmental projects on media education with subsequent applications have been studied, analyzed and comprehended in numerous works (Bednarek and Caple, 2017; Chernenko, 2019). As a result, a series of conditions have been identified on which the success of the project depends (Boelens et al., 2017).

4. Results

The model of media literacy training proposed in the research had to take into account the existence of mandatory conditions for implementing media education, as well as the coherence of actions and motivation to study. Working with new media requires the ability to work with learning platforms by all participants in the learning process. This structure can be schematically represented as follows (Figure 1).
Students, who are ready to work on a culture of media literacy, are actively involved in the process. They can adopt corresponding educational strategies in accordance with the content of education. Digital literacy is dictated by the necessity to be able to use bots, fact-checking programs, search and analytical tools.

This can give students more prospects and opportunities for independent learning. The blended learning context offers students open communication with teachers and colleagues, where complex topics and issues can be discussed, and self-controlled access to all forms of learning in the media education system is possible. The media literacy training course, being offered, intends to boost students’ motivation in learning and the degree of media literacy among future teachers and educators.

The culture of media literacy within university education can be presented through a description of the components of media education and the concept of the project proposed in the research (Figure 2).

![Figure 2 Components of media education. Source: author’s development.](image)

At the first stage of the experiment, which began on September 1, 2022, a survey was conducted among the teachers participating in the experiment about their expectations and capabilities in working with the discipline “Fundamentals of Media Literacy”. Additional consultations and training were also held with technical staff; training materials were created, and curricula were agreed upon, taking into account the specifics of training in crisis conditions. In other words, the norms of independent study of educational material are determined; algorithms for analyzing media and media materials are established; an individual study plan is provided for, determined by the student and the teacher (Semenets-Orlova et al., 2023).

At the second stage of the experiment, after two months of studying the course “Fundamentals of Media Literacy” in the EG, a control test was conducted to measure the respondents’ general media literacy level in all groups of students participating in the experiment.

<table>
<thead>
<tr>
<th>Table 1 The success rate in the experimental and control groups (stage I).</th>
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</thead>
<tbody>
<tr>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>EG1</td>
</tr>
<tr>
<td>EG2</td>
</tr>
<tr>
<td>CG1</td>
</tr>
<tr>
<td>CG2</td>
</tr>
</tbody>
</table>

Source: author’s development.

According to the results, the level of media literacy in the experimental group after completing the course “Fundamentals of Media Literacy” was rated “good” and “excellent”: EG1 - 51%, EG2 - 56%. In the other groups, the number of positive assessments is less by 6%: in CG1 - 54% and in CG2 - 47%, respectively.

At the second stage, it was planned to continue studying the experimental course with mandatory consideration of cases, related to crisis situations. During the final stages of teaching the course “Fundamentals of Media Literacy” to the experimental groups, a control measurement was also conducted; the students’ media literacy level was tested, and changes in the results were identified and systematized.

After completing the course “Fundamentals of Media Literacy”, the number of “good” and “excellent” grades (EG1 - 56%, EG2 - 61%) was received by students of the experimental groups. The results of respondents from EG1 and EG demonstrated a 10% improvement, while the performance in CG1 and CG2 (54% and 46%, respectively) remained at the same level; it even decreased by 1%; however, this result can be perceived within the margin of error.
Table 2 The success rate in the experimental and control groups (stage II) (author’s development).

<table>
<thead>
<tr>
<th></th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Good</th>
<th>Excellent</th>
</tr>
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<tbody>
<tr>
<td>EG1</td>
<td>6%</td>
<td>38%</td>
<td>40%</td>
<td>16%</td>
</tr>
<tr>
<td>EG2</td>
<td>6%</td>
<td>35%</td>
<td>43%</td>
<td>18%</td>
</tr>
<tr>
<td>CG1</td>
<td>9%</td>
<td>38%</td>
<td>39%</td>
<td>15%</td>
</tr>
<tr>
<td>CG2</td>
<td>9%</td>
<td>45%</td>
<td>37%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Source: author’s development.

At the final stage, at the end of the 1st semester, students’ progress was determined through testing and measurement of their level of media literacy. At the end, it became apparent that the level of media literacy had increased by 17% in the groups that had completed the course “Fundamentals of Media Literacy”.

However, the final assessment of the success of the experiment consisted of a number of indicators, namely: academic performance, ability to study in crisis conditions, respondent’s involvement in fact-checking projects, work with leading media, motivation and culture of media literacy, ability to self-analyze and self-control.

At the final stage, a study of respondents’ attendance of the course “Fundamentals of Media Literacy” during the pedagogical experiment was conducted. This indicator is especially significant in the context of studying in wartime, where blended learning and control helped teachers and students interact even in crisis conditions. An indicative criterion for approving the introduction of the basics of media education is the attendance rate (the table shows the total number of students in the group (15 people in each group)).

![Attendance chart](image)

Figure 3 Attendance chart of students of the discipline “Fundamentals of Media Literacy”. Source: author’s development.

Apparently, attendance during the semester is stable in the experimental groups, and it almost reaches full strength at the final stage (exams). However, attendance was generally lower in the second semester, and it was better in the first semester in EG 2 due to external factors (intense military operations in the Kharkiv region). However, the 100% attendance at the exam shows the importance that respondents attached to media literacy as an indicator of professional growth.

At the final stage, a survey was also conducted to assess the respondents’ experience of enhancing the culture of media literacy through the introduction of a new academic discipline “Fundamentals of Media Literacy”. The survey contained a number of statements related to assessing the necessity of media education in crisis conditions on the basis of blended learning, introduced for future specialists in social communications, political science, and the pedagogy sphere. Closed-ended answers required a “yes” or “no” answer. The results were presented in percentages (Bielova et al., 2022).

During mastering the course “Fundamentals of Media Literacy”, students had to acquire a set of skills that allowed them to navigate the media space, and information flows, and use fact-checking tools. In the survey, it was proposed to evaluate how important, useful and interesting the acquired skills turned out to be for the respondents. The survey included 7 questions.

Table 3 Respondents’ evaluation of the effectiveness of the course “Fundamentals of Media Literacy”.

<table>
<thead>
<tr>
<th>Evaluation criteria</th>
<th>EG1, Yes</th>
<th>EG2, Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A media literate person constantly improves the level of information technology skills</td>
<td>52%</td>
<td>54%</td>
</tr>
<tr>
<td>Fact-checking of the news in crisis conditions is a necessary skill</td>
<td>73%</td>
<td>69%</td>
</tr>
<tr>
<td>Media literacy is a necessary academic discipline</td>
<td>52%</td>
<td>61%</td>
</tr>
<tr>
<td>Introduction of media education contributes to improving the quality of vocational education</td>
<td>36%</td>
<td>41%</td>
</tr>
<tr>
<td>In a crisis situation, mastering media education requires effort</td>
<td>70%</td>
<td>79%</td>
</tr>
<tr>
<td>It is necessary to continue to raise the level of media literacy</td>
<td>88%</td>
<td>83%</td>
</tr>
</tbody>
</table>

Source: author’s development.

Based on the survey results, it can be argued that there is a positive assessment of the university’s policy on introducing the course “Fundamentals of Media Literacy”. The willingness is revealed to use high technologies, educational learning
platforms and social networks for information security under the conditions of martial law. This discipline also fosters a self-critical attitude and motivation to improve one’s own level of media literacy. The initiative to keep increasing media literacy (85%) and the requirement to do fact-checking of the news in the context of crisis (72%) received the highest ratings.

Students with a high level of self-orientation, who are able to plan the learning process, are more actively participating in fact-checking activities on social educational platforms and online resources, which provide positive results while dealing with media education in situations of crisis. These respondents easily navigated the information space.

5. Discussions

Several studies (Bauer, 2017; Baxter, 2021) consider increasing the culture of media literacy as a basis for general awareness of citizens in a democratic society, where one of the main positions is to determine the success of international and governmental media education programs. Thus, the study on introducing media literacy at the level of citizen journalism (Ivanova, et al. 2020; Omazić, Čaćija, 2020), has revealed that active involvement in the development of the media education level increases the respondents’ desire to grow professionally by 10% (from 20% to 30%). The authors attribute this effect to volunteer activities and the practice of mastering foreign languages for internships in foreign media. The researchers determined that the motivation for self-study, the acquisition of media education skills as part of professional growth in the work of a journalist was assessed quite positively, and the indicator of motivation for professional growth increased. In fact, the research has shown that respondents (85% of those surveyed) consider it necessary to continue to improve their media literacy and have professional fact-checking skills (72%), which is especially valuable in crisis conditions.

It is also important to work on developing models to improve the culture of media literacy, such as the SAMR model (Substitution, Augmentation, Modification, and Redefinition). This is an algorithm for acquiring media literacy that has several levels. The 1st level (Substitution) assumes that technology acts as a direct replacement for methods and tools, without functional changes. Augmentation is at the 2nd level; that is, the means or the technology works as a direct replacement for the tool, taking into account functional improvements. The 3rd level (Modification) allows for a significant redesign of the means and technologies for building and implementing tasks, and at the 4th level (Redefinition), there will be a situation when technology allows the creation of fundamentally new tasks and their solutions (Petryk, 2017). In the world, such a model is found in Ukrainian studies, representing media as tools that teach people to function normally in the world of information technology influence. A person should learn to operate new media skills, knowledge of media education, where knowledge of the SAMR model reveals a clear picture of the purpose and outcomes of using media tools and resources competently and successfully. According to the results of the experiment conducted by our group of researchers, the introduction of the course “Fundamentals of Media Literacy” for 1 semester contributed to an increase in the level of media literacy among students by 17%.

A number of researchers have identified the significant role of research platforms in the strategic positioning of media and information literacy, especially in the crisis conditions of an unstable situation after the end of hostilities (Huskić, 2022). In fact, the positive attitude of students participating in the experiment to introducing the media education course and improving their level of media literacy is an important factor in implementing the presented experience on a regular basis. Our research has revealed that the introduction of a high level of media literacy also depends on such institutional components as teachers and students, their positive attitude and motivation. By the way, people identify the key factors, prerequisites, and level of motivation to improve media literacy, their professional development, and its successful implementation.

All the necessary conditions for successful activities in media education in crisis conditions (ongoing professional development of teachers, organizational readiness of the administration, material and technical capabilities of the university, readiness and approval of students) should be provided by universities.

6. Conclusions

In general, the results of this experiment show that modern media education, especially the one implemented in crisis conditions, should actively use the possibilities of digital technologies, online learning, media power, and mass media that are ready to cooperate in the educational space in crisis conditions.

The introduction of the basics of media literacy in crisis conditions aims to stimulate the desire to acquire skills in media education, fact-checking, and information technology. Media education in the context of warfare should be a strategic educational direction in the field of higher education. The research project for introducing the course “Fundamentals of Media Literacy” is an example of the readiness to apply high technologies, and use the information and the capabilities of modern new media and social networks professionally, including for one’s information security under martial law conditions. This discipline was positively assessed by the students, who approved the proposal to continue to improve media literacy (85%) and identified the need to conduct fact-checking of the news in crisis conditions (72%).

It should be noted that, in addition to the academic performance progress, the percentage of students with the skills necessary for a media literate specialist has also increased.

Thus, increasing the culture of media literacy can have a positive impact on education quality, in general, and the students’ motivation to study in crisis conditions, in particular. Using a range of different learning tools, digital technologies,
media and learning platforms also contributes to the assimilation of educational material in such a way that students can use the acquired knowledge, skills and abilities on a daily basis. He will be able to navigate a crisis situation thanks to his ability to work with information and media, and he will use these skills in professional activities and the academic environment. All the outlined testifies to the quality of university education, where the possibilities of media education are used.

The active use of verbalization of mental activity in education and encouragement of self-expression is crucial for successful learning and further career development, and the educational system should promote such values and the cultivation of positively minded citizens.

Further exploration of models for raising the level of media literacy in society opens up space for the consistent selection and ongoing implementation of tools for analyzing and qualifying media texts and media resources from the perspective of a media literate professional.

**Ethical considerations**

Not applicable.

**Conflict of Interest**

The authors declare no conflicts of interest.

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**References**


