

# Media literacy education: strategies and challenges

Iryna K. Pokulyta, Olha V. Sotska

National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute",  
37 Peremohy Ave., Kyiv, 03056, Ukraine

**Abstract.** In the era of the information society, the abundance of information that we are exposed to is overwhelming. The quality, verifiability, and motivational orientation of this information vary widely, making it difficult to discern what is true and what is not. This is especially true in the context of the pandemic, where social isolation has made us more reliant on digital media for information. As a result, creating conditions for information security has become a primary task. One approach to solving this problem is media literacy education. Media literacy education is the process of teaching people how to critically analyze and evaluate media messages, as well as how to create their own media messages. It is an essential skill in today's world, where we are constantly bombarded with information from a variety of sources. This article discusses strategies for introducing media education in international organizations. It analyzes the specifics of media education and media literacy in various aspects and examines the role of critical thinking in countering information aggression. Critical thinking is an essential tool for evaluating the quality and verifiability of information, and it is particularly important in countering the risks and dangers associated with establishing norms of social distance for the prevention of epidemiological threats.

**Keywords:** media literacy, media education, critical thinking, information security, social distance, pandemic, digital media

## 1. Introduction

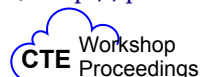
In the contemporary era, it is undeniable that every scientific advancement and research development is influenced, to varying degrees, by the transformative global experiences humanity gained in 2020. The COVID-19 pandemic has not only altered the trajectory of political, economic, and legal preferences due to its direct threat to human life and health, but it has also ushered us into a new era of the information society [52, 57]. Our prior understanding of this digital reality, in terms of anthropological and socio-cultural aspects, served as a mere "airbag" during the transition to a society where information networks form the backbone of global and local connections. In essence, an individual's life, replete with social contacts and direct involvement in various routine practices, has dispersed along the paths of multimedia activity. Digital technologies and the continuity of social interaction they provide have emerged as a lifeline. However, it is crucial today to contemplate the unforeseen and unpredictable communicative and socio-cultural threats we have encountered.

The relevance of this issue is tied to the fundamental characteristics of the information society: the dominant role of information in shaping various facets of social life. Information flows structure and guide social activity primarily through a multimedia communication system of interaction. Consequently, each of us is constantly bombarded with a deluge of information, varying in content, quality, verifiability, and motivational orientation. As Luhmann [55] aptly noted, communication today defines sociality. Given that sociality itself is currently undergoing significant transformations

ORCID: [0000-0002-1659-7978](https://orcid.org/0000-0002-1659-7978) (I. K. Pokulyta)

Email: [i.pokulyta@ukr.net](mailto:i.pokulyta@ukr.net) (I. K. Pokulyta); [olyasotskaya03@gmail.com](mailto:olyasotskaya03@gmail.com) (O. V. Sotska)

Website: <http://philosophy.kpi.ua/vikladachi/pokulyta-iryna-kostyantynivna/> (I. K. Pokulyta)



© Copyright for this article by its authors, published by the Academy of Cognitive and Natural Sciences. This is an Open Access article distributed under the terms of the Creative Commons License Attribution 4.0 International (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

in the physical world: distance as a condition of security, communication not only determines but also assumes the role of representation, compensating for various manifestations of the completeness and integrity of the mental existence of society. Thus, information risks are associated with our awareness of our existence in the world of axiomatic informatization, how we organize security measures to prevent direct interference with mental privacy – cognitive subjectivity, and how we maintain sociality as a culture of coexistence.

The need to establish conditions for information security gives rise to a problem that the modern education system must address. Specifically, it should equip an individual (a subject of information and communication relations) with media literacy. The absence of media literacy, which implies media ignorance, serves as a fertile ground for conducting information (hybrid) wars, manipulating consciousness, turning into a victim of suggestion, various forms of dependence, etc. In the recent past, the media nature of these processes allowed for their evaluation based on the criteria of reality – virtuality. However, these distinctions have now lost their rigid binarity and have instead acquired the qualities of flow, mutual compensation, additions, etc. Today, we can assert that virtuality fills all the gaps and physical distances of social reality, at least in communicative practices. In other words, the demarcation of threats based on their truthfulness is inadequate. The response of social, collective, and individual consciousness to information, the inability to understand, hence blind trust in the source of the message, ultimately media entertainment or animosity and intrigue, “embedded” in the content of information: all these factors become decisive.

## 2. Related works

The problem of media literacy in terms of structure, components, functions was examined by Buckingham [12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37], Christ and Potter [39], Potter [60, 61, 62, 64], Potter and Thai [65, 66]; Hobbs [50] research deserves special attention since the author continues, develops and clarifies the founders’ views of scientific reflection of media literacy. The issue of informational dangers, threats, risks is presented by us in methodological interaction with theoretical studies of media education and in the context of the problem of critical thinking, based on philosophical principles, starting with Aquinas [4], Aristotle [6], Bacon [7, 8], Descartes [42, 43, 44, 45, 46] and other scholars whose work is fundamental in the development of the epistemological, methodological problems of science. The representatives of American philosophical thought of the twentieth century, James [53] and Dewey [47], in the direction of understanding modern alternative approaches to the problem of the formation of “critical thinking” – the basic competence of media literacy [67]. An important concept, in terms of threats to the loss of sensory, spiritual culture – the fullness of social interaction, as a rupture of historical time is Beck’s “risk society” [11]. The appeal to his theory is methodologically guiding in relation to one of the aspects of digital reality threats, namely the transformation of sensory authenticity as a dominant of the development of human relations and social interaction.

The guidelines of our research, the purpose of understanding the problem of raising public, educational demand for the acquisition of media literacy, are establishing norms of remote interaction as a new reality of communicative culture. Illumination of ignorance in the context of media communication as the growth of threats, information risks in the modern era of the development of the information society and the search for social meanings of preserving the fullness of the culture of human relations in the context of digital reality. The growth of the dangers produced by the various factors of the psychological, intellectual, and ideological insecurity of the subject of media

communication determines those aspects of the problem of media literacy, which are becoming tasks for the development of the media education system.

### **3. Practical steps and awareness of media literacy in the prevention of information threats and avoidance of risks during a pandemic**

The UN and NATO addressed the problem of creating the basis (political, legal, economic, etc.) of information security. The UN and its units are doing significant work in the search for approaches to media education implementation. The United Nations Alliance of Civilizations (UNAOC), in partnership with UNESCO, introduced the [Media Center for Media Literacy – MIL](#), a platform for global and multilingual dissemination of media literacy resources, and the publication of articles on media literacy, media literacy policy and youth media [3]. With the help of this platform, teachers can use available topics about media and information literacy in their schools. The website is open to users and allows registered users to upload the content on the website and add information in any language about MIL resources, organizations and events. The interactivity of media communication as a characteristic of this website's functioning is one of the determining factors concerning modern criteria of media literacy.

UNESCO explores the dependency of media leverage and media literacy on hate, radicalization, terrorism and violent extremism. The main achievement is the formulation of the basic principles of information and media literacy development [48]:

1. The implementation of MIL will be most successful in the areas where different stakeholders share their vision and work together to achieve it by sharing knowledge and resources.
2. MIL basics can be developed without access to technology (for example, in oral forms or only in printed forms). However, MIL programs must be available in all existing and new media so that citizens can take full advantage of them.
3. The development of media and information literacy is fundamental to nation-building, economic development, human rights and cultural and linguistic diversity.

A number of international security-focused organizations, from the Organization for Security and Co-operation in Europe (OSCE) to NATO, have identified media literacy as a tool for counteracting hybrid wars because the ability of the audience to think critically and analyze manipulative propaganda contributes to a conscious classification of the veracity of information [41]. NATO's Latvian Strategic Communications Center (NATO StratCom COE) has introduced the News Hero social game designed to help readers identify misinformation on the Internet [58].

In today's reality, we are confronted with a large amount of information, and much of it is untrue or unreliable, indicating an urgent need to create new approaches to strengthen our information filtering skills and media literacy development in general. In isolation due to the coronavirus pandemic, we spend much more time online. On the one hand, online life increases the risk of becoming a victim due to the impact of false information; however, at the same time, the style of everyday life in online mode allows the creators of media literacy projects to attract and influence a wider audience through virtual events. For example, Third Media Literacy Days, organized by the Agency for Electronic Media (AEM) and UNICEF under the auspices of the Croatian Ministry of Culture and the Ministry of Science and Education, are being held online this year due to the coronavirus pandemic [70]. Undoubtedly, a large number of similar events, international conferences, training courses and seminars were held in 2020 in the format of virtual communication. And this is an essential practical

step in implementing the conditions for the formation of media literacy as a factor of information security. To support distance learning, AEM and UNICEF publish video lessons on media literacy for primary and secondary school students, prepared by teachers from different parts of Croatia. They are available on the [website](#).

UNESCO has joined forces with members of the UNESCO-led Global Alliance for Partnership on Media and Information Literacy (GAPMIL) to counter media disinformation caused by COVID-19. To combat disinfodemic (a newly created term that is a combination of the words pandemic and disinformation), the UNESCO-MIL Alliance has taken the following steps:

1. A series of webinars covering various issues related to MIL and COVID-19 disinfodemic. The list of webinars is available [here](#);
2. Opening free access to educational resources. All available resources can be checked on this [link](#);
3. UNESCO crowdsourced translations of its handbook, "Journalism, Fake News, and Misinformation", into several new languages in response to the disinfodemic. For further references check this [website](#) [69].

Various countries around the world are actively involved in countering the spread of disinformation about the coronavirus. In Ukraine, UNICEF and INSCIENCE launched the online competition [INFOTON](#), during which young people aged 13–25 from Ukraine could create their own media literacy projects on various topics and in various formats. As part of the competition, the teams developed unique projects on the topic of "media literacy" in just 48 hours, with the support of mentors – specialists in the fields of business and media, the industry of creativity, financiers, legal advisers. The three best projects received prizes of 50 thousand hryvnias.

Thanks to [INFOTON](#), young people will be able to encourage and teach their peers to perceive information consciously, work with it, distinguish fact from "fake" (conscious disinformation) – these skills are critical during a pandemic of coronavirus.

In this context, it is also important to mention such initiatives that are focused on deepening media literacy and preventing information risks in connection with the COVID-19 pandemic in different countries and on different continents:

1. The Pakistani newspaper "Dawn" published a [short guide](#) for citizens experiencing disinfodemic as an act of digital media literacy.
2. The African Center for Media Excellence (ACME) offers a [list of resources, tools, tips and resources](#) related to COVID-19 reporting, including fact-finding.
3. The Afghan NGO NAI has published "[Fundamentals of Journalism during COVID-19](#)".

These initiatives are necessary in times of a pandemic, given the circumstances of increasing information risks due to psychological factors, emotional stress, social attitudes of alarmism for fear of life in the face of threats from a little-studied viral phenomenon.

#### **4. Research outline and analysis of the material**

In our opinion, the introduction of media education in the educational process is an answer to the modern challenges of information risks and threats. Therefore, it is a vital step on the way to the upgrading of the modern education system. Even though in 2020, under the influence of circumstances – the threat of losing control over the rate of spread of the coronavirus disease COVID-19, measures to implement distance education are of paramount importance, the very specifics of remote communication are not an educational technology for media literacy. In this case, the

media is not a new structure of a content organization with features of information and semiotic systems. It is a communication channel with the appropriate technical means of communication of the educational process subjects as ensuring the functioning of remote interaction. So, the questions remain, both of a theoretical nature – methodology, and practical: regarding the successful integration of media education in the educational process, because the school will have to consider new strategies for presenting information since such a learning process will no longer be conducted according to theoretical principles with a focus on memorization, gradual assimilation of knowledge and assessment. The practical part will serve as a basis and consider the students' experience, the available skills of analysis, and the development of an immediate reaction.

In our opinion, the question arises in terms of the development of the related case technologies and programs concerning the realization of virtual educational practices. Thus, the cognitive, psychological sphere of the educational space will undergo significant changes, and in the long run – the existence of society. It is important to note that the strategic goals of traditional education and media education are as different as the scientific and pedagogical approaches that underlie them: the formation of an intellectually mature or informationally protected, manipulatively invulnerable personality. Obviously, the demand, the request of society is saved on the first version of the strategy and formed on the second. Moreover, in a separate functioning, they do not provide the completeness and harmonious development of the individual in the information society's conditions. It is indicated by both the forecasting of results from the most theoretical approaches and empirical data – the experience of educational institutions in 2020. In particular, maintaining the necessary social distance and the transition to online communication in the educational process of higher education institutions with a large number of students has exacerbated issues of mental and cognitive nature. Only the monitoring of the situation and operational procedures to overcome alienation, loss of professional, cognitive motivation has become a solution to the issues of transformation of sensory authenticity of culture in general and the culture of the educational process in particular. An example of such activities is the project of leisure online communication *Tiresij*, which was developed and implemented by the staff of the Department of Philosophy in Igor Sikorsky Kyiv Polytechnic Institute.

The need for this activity is the awareness of members of the staff of the fact that students who were formed under the care (advice, opportunity to see examples of behavioural culture, valuable guidelines, semantic guidelines) of their mentors – teachers, and felt the cohesion of the team: students, graduates, teaching staff of the department, now find themselves in a situation of the isolated location and a single format of interaction: the educational process in online communication. Therefore, it is necessary to create conditions, initiate information platforms for informal interaction with the possibility of implementing cultural activities to consolidate the team to implement social and educational, value-oriented intentions of teachers who are aware of their own responsibility for the future of students.

Undoubtedly, one media practice on the emotional, semantic content of informal interaction cannot compensate for the gap of direct communication as methodological completeness of the educational process. However, the targeted design of events aimed at implementing media practices, with developed techniques for reproducing traditional communication, is one of the elements of balance and risk prevention. We are talking about the risks that arise today in connection with the break of the “real – virtual”, “past – future” as “before and after” the 2020 pandemic.

In the context of globalization, according to the concept of Beck [10], risks are formed where the place of the past, which determines the present, takes the future as

a determinant of today's processes. In this case, media education can be considered in the potential to preserve the culture of educational practices, not only in providing distance interaction. According to the researcher's theory, we can create a situation of uncontrolled risks as a leap from real to virtual communication because the past is an academic experience, and current educational technologies will not find the fullness of realization in the present.

Thus, the circumstances of the pandemic exacerbated the problem of the need to develop media education as a system focused on, firstly, the implementation of distance forms of communication in online learning and, secondly, the possibility of "new media" (Manovich [56]) in the formation of interactive communication and resource preservation of content, methods and culture of traditional forms of learning.

The goal of media education is media literacy. In turn, it is based on such components as the need to master critical thinking and techniques for working with audiovisual content, which can reproduce complex multimedia nature and have a multilayer semantic structure.

The study of media literacy is considered multidisciplinary because it is based on the tools and methods of sociological, psychological, pedagogical, political, cultural, gender, racial and other studies. This leads to studies of the concepts of media education and media literacy in various aspects.

For example, from a cognitive perspective, Potter [63] defines media literacy as "a set of perspectives that we actively use to expose ourselves to the mass media to interpret the meaning of the messages we encounter", For Potter [63], the key to creating media literacy is the use of three components: a personal locus, knowledge structures and skills. The personal locus consists of goals that determine the material that can be filtered or ignored by sampling, and drives that determine the amount of effort it takes to achieve the goals. To achieve media literacy, one will also need a solid knowledge structure in five areas: the media industry, media content, media effects, media audiences, on the one hand, and knowledge about the real world, on the other. Possessing good knowledge in abovementioned five areas, a person will be able to make better decisions, search for and work with information and derive meaning from it to meet defined goals. Despite the fact that we consider media literacy in the context of preventing information threats, it can be argued that knowledge of the functioning of the media components is limited and ineffective when it comes to preventing the risks of strategically planned dangerous actions. Finally, we need to use appropriate skills to build knowledge structures. Potter [63] identifies the following skills: analysis, evaluation, grouping, induction, deduction, synthesis and abstraction as the most important tools for regulating the influence of media and increasing media literacy. These methods will be effective in different ways depending on the media content or the specifics of the media audience. However, common in their implementation as dangerous measures is the knowledge of the subject of media activity in the real world. Thus, media literacy does not level but requires education and competence in the traditional sense of knowledge and skills.

Buckingham [26], on the contrary, approaches this issue from a socio-cultural point of view. He notes that recently the term "literacy" clearly has a certain degree of social status, adding that "literacy is a phenomenon that is only realized in and through social practices of various kinds, and it, therefore, takes different forms in different social and cultural contexts". Buckingham [26] points to four broad conceptual aspects that are generally regarded as critical components of media literacy. These include, first, representation: the ability to evaluate the encountered material, for example, by assessing the implicit and explicit motivation of those who created it and by comparing it with other sources, to question the reliability of the represented material. Therefore, the formation of a media literacy platform for this component should be based on

the competencies of comparative, analytical, critical comprehension of information through the ability of independent research and belief in the integrity of the source of information. In this aspect, there is a need to establish criteria for integrity and ways to verify it.

Second, language: revolves around the understanding of the structure of the particular forms of communication and functions of languages. This, in our opinion, is the most difficult component of mastering media literacy. It is quite obvious that, being free from restrictions on the circulation of information, media space opens wide perspectives for linguistic simplifications, omissions, inaccuracies, and the contextual content adjusts to the structural limitations of forms of communication. In turn, this causes variability of interpretation, distortion of meanings. Also, the decline in the culture of speech is gaining momentum due to the possibility of anonymous participation in communication and so on. Even a new trend of deliberate disparagement of a language is emerging. Thus, the development of linguistic competence, the high level of lexical, spelling and other requirements are components of information verification, factors in the quality of message evaluation, and the self-discipline of linguistic improvement in media literacy. A separate aspect of this problem is also the semiotic structure of media communication. It is complex, taking into account both the features of the audiovisual text (the role of semiotic structures of signs, symbols on various software, as well as photos, video content, verbal text, etc.) and the multimedia basis of the information and communication activities.

Third, production: understanding who is communicating to whom, and what is the purpose of the conversation. This component, in our opinion, provides for a set of factors of maturity, the preparedness of the subject of media communication: psychological (depth of understanding of the interlocutor, search and acquisition through the communication of a common goal), practically oriented (the goal of media communication is transparent, convincingly formulated and realistic regarding the ways to achieve it), a factor of self-discipline (factors of linguistic, moral and ethical responsibility) and the acquisition of experience as a quantitative and qualitative improvement of the ability of effective media communication.

Fourth, audience: an awareness of one's own position as an audience (reader or user). It includes understanding how media is targeted at audiences and how different audiences use and respond to them. Awareness of the strengths and weaknesses of the target audience makes it vulnerable to hybrid threats. Information threats are possible and arise where the subject of communication is "ready" to accept it. So it is the target audience: those communication participants, whose style of thinking, level of knowledge, value priorities are reflected in particular rhetoric. In the ocean of information, each of us searches for "our" content. In this positive process (searching for like-minded people, interlocutors) the potential of danger is hidden: together with uncritical perception of content and the involvement of sophisticated rhetoric, some people can use us with negative intent, because they push or impose conclusions that have no objective grounds. Thus, sociological competence – understanding the target characteristics of the audience and awareness of rhetoric as a prevention of imposed conclusions – is a media literacy component.

Buckingham [26] points out that media literacy education often focuses on the information component. However, it can be argued that literacy also has a critical dimension. Literacy in this broader sense includes analysis, assessment and critical reflection. This entails mastering metalanguage – that is, a means of describing the forms and structures of a particular mode of communication, and providing a broader understanding of the social, economic and institutional context of communication, and how they influence people's experiences.

The results of the Potter's and Buckingham's studies formed the basis for further

research and presented the area of media literacy as an educational, psychological, social and cultural problem that needed to be addressed.

Recent studies by Hobbs [49] support the social vision of media literacy: “Media literacy can also be understood as a form of advocacy or as a social movement, aimed in particular at young adults, children, and parents; many see it as a specialized academic field associated with either media studies or education” Although her previous publications adhere to both psychological and social points of view: the term “digital and media literacy” is used to cover the entire range of cognitive, emotional and social competencies, including the use of texts, tools and technologies; critical thinking and analysis skills; message writing practice and creativity; the ability to engage in reflection and ethical thinking; and to participate actively through teamwork and collaboration”. Now we have an intensification of the scientific context of reflection of the problem of media literacy and the understanding of the institutional, civilizational scale of social practices that require appropriate condition – the level of media literacy. As a result, the scope of media activity expands, the number and variety of subjects of this activity increases, so it is logical to realize that the increase of information risks, threats and dangers is taking place.

Hobbs and Jensen [51] identifies five competencies that a person must possess in order to be proficient in digital and media literacy:

1. *Access*: Finding and using media and technology tools skillfully and sharing appropriate and relevant information with others. In our opinion, it is information awareness, mobility combined with social responsibility: the timely received information and its reliability encourage its dissemination in the environment. As we see today, in the wake of a pandemic, such media skills can have certain informational threats and negative social consequences. The peculiarity is that even the expert opinion on measures to combat the COVID-19, even in the best version of its presentation in the media content, is a scientific development that has not passed all levels of academic requirements for its accuracy. And the dissemination of such information in the social environment can cause unpredictable threats, psychological trauma etc.
2. *Analyze and Evaluate*: Comprehending messages and using critical thinking to analyze the message’s quality, veracity, credibility, and point of view, while considering potential effects or consequences of messages. The first and second competencies, in our opinion, are interconnected in terms of possible information threats. Since the propensity for alarmism, panic, and, therefore, affective actions in case of irresponsible dissemination (or concealment) of information is one of the dangers of the information society. This aspect is especially relevant in connection with the experience we got in 2020.
3. *Create*: Composing or generating content using creativity and confidence in self-expression, with an awareness of purpose, audience, and composition techniques. Creativity as a human need is the driving force of civilization and everyone’s natural desire for self-realization. However, it requires a specific starting level of knowledge, developed talents, responsibility since the original content and creative product should not be identical. In our opinion, this is another type of information danger associated with the pseudo-cultural deceptive simplifications of the willingness of everyone to express themselves creatively. Digitalization of information imposes an additional responsibility on the subject of the creativity, since the produced content remains forever, and thus forms an image, reputation, semantic imprint on future activities. Whatever the commercial attractiveness, the process of information creativity must take place in the legal, constructive field of social development.

4. *Reflect*: Applying social responsibility and ethical principles to one's own identity and lived experience, communication behaviour and conduct. In our opinion, this competency fundamentally defines the information space as a human, social space of being. Our identity – an identity in various conditions of communication is not a temporary, episodic phenomenon. It is an in-depth characteristic of a person, the world of culture, spirituality, therefore, leaving “superfluous” – morality – on the shore, and going into the ocean of informational existence without realizing the reality, realness of events, responsibility for them, means breaking the heredity of culture, termination of human history. So the degree of responsibility is extremely high. The real and the virtual world, the genuine and the media presented, must preserve the uniform, moral, spiritual imperatives of universal human existence.

The above mentioned examples of the social action project “Tiresij” on preserving the completeness and integrity of culture in virtual communication confirm the importance of this criterion of media literacy in online communication as a basis for maintaining social distance during a pandemic, but also the preservation of coexistence, solidarity in interaction - the basis of the moral climate and the avoidance of the trauma of isolation and alienation.

5. *Act*: Working individually and collaboratively to share knowledge and solve problems in the family, the workplace and the community, and participating as a member of a community at local, regional, national and international levels. In our opinion, this competence urges the need to develop various applied knowledge, for instance, in the field of social design. The implementation of this knowledge and abilities in the media education system will open up opportunities and provide a toolbox of actions, methods and forms of collective activity, co-creation and the like.

Meanwhile, Bulger and Davison [38] take a psychological, cognitive approach, defining media literacy as a process or a set of skills based on critical thinking. They question the ability of a person to assess credibility as social media personalizes information more and more and provides five broad recommendations for those who are interested in developing the future of media literacy. It is recommended to use the current media crisis to consolidate stakeholders. However, when implementing media security projects in parallel with media attacks and destabilization projects, achieving media literacy is not possible.

It is worth highlighting a recommendation on the development of a holistic understanding of the media environment. The wording of the advice is not limited to five areas as in Potter's works; however, the specific components that need to be mastered to achieve a holistic understanding are not provided. The expected result is the adoption of carefully considered and independent decisions in the processing of information, so we can conclude that one of the components is the use of critical thinking.

## **5. Critical thinking is one of the main competency-based strategies for media education**

The central concept encountered in all definitions of the above approaches to understanding media literacy is critical thinking. Its only correct definition has not been established, but competing definitions can be considered different concepts of the same basic idea: the goal determines thorough thinking. There is no unity in the theoretical interpretations of the process of thinking. The most common and traditional concept of thinking can be called logical. Logic was historically the first science of thought. Aristotle investigated it in detail and within the framework of

which he examined such components of thinking as concept, judgment, and reasoning. Aristotle speaks of “thinking” as an activity of the higher Mind, praises it as the height of bliss and the joy of life [68].

In the Middle Ages, the idea of systematic thinking was embodied in the writings of Thomas Aquinas (*Summa Theologica* [1, 2, 5]). The ability to thinking was considered innate, and thinking was considered separately from the psyche. According to Aquinas [5], God gives some of us greater potential for greater depth of thought than He gives to others: “Experience shows that some understand more deeply than others; as one who draws his first principles and final reasons understands it better than one who reduces it to his immediate reasons”.

In the Renaissance, scientists again returned to the postulate of antiquity that the psyche is a consequence of the work of the brain. Francis Bacon was concerned with how we misuse our minds in the search for knowledge [8]. He also drew attention to the fact that most people develop bad thinking habits (which he called “idols”, “phantoms”) that make them believe that they are wrong or deceiving. His book could be considered one of the oldest texts that laid the foundations for the study of critical thinking [59]. Descartes [44], a follower of rationalism, considered thinking an autonomous, rational act, free from direct feeling. At the same time, sensualists, on the basis of the teachings of Condillac [40], gave a crucial importance to sensation, asserting that “to think means to feel”, and the mind is “complicated sensation” [9]. However, the unifying element of the views of various researchers – representatives of modern thinking, is not only the search for the construction of reliable knowledge, but most importantly – the invention of the foundations of true knowledge. This is an urgent problem in the development of critical thinking today, because the whole construction of mental activity should be based on the foundation of truth, not false judgments.

At the end of the 19th century, a new philosophical tradition appeared – pragmatism. His representative, James [53], explains what our thoughts consist of: “Our thinking consists more of a sequence of images where some of them evoke others. It’s kind of spontaneous daydreaming, and it seems it is likely that higher animals (humans) should be susceptible to them. This type of thinking leads to rational conclusions: both practical and theoretical” [54].

Another representative of this movement who developed a pragmatic theory of knowledge is Dewey [47]. He first used the term “critical thinking” to describe a teaching goal, although more often, he used the term “reflective thinking”. He defined it as an active, persistent and careful consideration of any belief or intended form of knowledge, given the reasons that support it and the subsequent conclusions to which it is inclined.

Critical thinking is self-governing, self-disciplined, self-controlled and self-correcting thinking (it faces the face and contrasts with Potter’s media-focused components). This type of thinking involves accepting strict standards of excellence and conscious ownership of them. As a result, a person gains the ability to communicate effectively and solve problems.

The problem of our study is information security as the purpose of media activity. It is worth saying that information security, in our opinion, is fundamentally different from a sense of danger in the pre-information society. In the periods of the twentieth century and earlier, security correlated with confidence in the absence of threats of a different nature. For example, the financial and economic downturn, external conquests, social transformations and etc. Actually, this moral comfort – confidence, reflected the nature of the security of investments in the actions of the authorities in such a form as trust. On the peculiarities of entering the stage of the information society, security cannot be fully implantable in certain state institutions, since the nature

of information processes: communication, openness, minimal control over various kinds of media, has globalization specifics. Therefore, security policy responsibility in a significant component relies on the user of information networks. And therefore, a sense of trust in the way of shifting the security functions to the structures of the external plan can just make it fall into the danger zone. Today, all the levers of control are concentrated in the information, and the subject of its creation, distribution may remain anonymous or, at least for some time, unknown. Thus, the situation of an uncontrolled, from the side of a person – the subject of media communication, usage of the capabilities of information networks can carry threats, starting with manipulative influence, including the outbreak of social protests and ending with hybrid wars. In fact, in the aspect of information security, not only an important but also a necessary preventive means of building social and communicative relationships is acquiring of media literacy. Critical thinking is one of the elements of media literacy, which in turn is one of a set of measures designed to achieve a state of security of information needs of individuals, society and the state.

The information platform is increasingly used as a bridgehead for bringing about conflicts of various scope. Media literacy can be an option of confrontation. On the one hand, it is characterized by its impact on systems for receiving, processing, disseminating and storing information that may hypothetically carry certain dangers. A media educated person will not be able to turn a blind eye to the manifestations of media attacks, so he/she will actively perceive them to produce a response – a reaction. Although this answer leaves a chance of being mistaken, in a situation with information ignorance, the risk of positive (i.e., the risk of becoming a victim of moral, psychological, ideological influence) perception of media attack is exceptionally high. And even if a media illiterate person does not show an apparent aggressive reaction, gives the impression of a complete lack of understanding or ignore the attack, information aggression will be successful at a subconscious level, because the process of critical thinking and analysis based on the conscious knowledge of strict standards was not actualized. On the other hand, possessing media literacy will make it possible to draw conclusions from attacks by an information-aggressive manipulator and to apply measures to protect their similar systems from destructive and controlling influence.

## 6. Conclusion

Thus, the experience of social and educational interaction in the large-scale implementation of online communication in 2020, as a necessary component of vital security – social distance during the pandemic, has exacerbated the relevance of media literacy as a system of protection against information threats. The scientific developments, practical measures and project trends considered in the article in the criteria “before” and “during” the pandemic provide an opportunity to draw conclusions about the following:

- Media literacy is a necessary component of modern education, as its demand has been revealed in the context of global challenges and dynamic changes in the vital norms of social reality.
- Experience related to counteraction, prevention of viral threats, namely, remote communication based on the multimedia system of the information society, has shown an important mission, which is entrusted to the subjects of media activities, especially the organization of media education.
- It is the awareness and consideration of the risks associated with the rupture of communicative culture in terms of its direct and media functioning.

- Thus, the search for social meanings of preserving the completeness of the culture of human relations in digital reality conditions is a necessary task.

Media literacy does not involve the opposition of real and virtual but rather provides an opportunity to preserve the meanings of real reality as a basic criterion for information interaction.

Therefore, media literacy does constitute a constructive opposition to the violators of the world of information relations – the subjects of illegal, immoral, manipulative actions, adds a resource of confidence, the basis of independence regarding the successful choice of tools to counter information aggression or even war. However, an important task arises – to master the media literacy in the conditions when we are already subjects of relations and are in the active phase of the development of the information society. Scholars have made many suggestions as to where and how they believe media literacy should be taught, in what way it should be acquired, and how this type of learning should be evaluated. As an ambivalent process in terms of the potential of mental threats and insecurity against ideological aggression, we think that informatization increases the range of dangerous informational influence (from suggestion to war). Nevertheless, informatization of education through the development of a media literacy system is a way of positive development, since it lays the foundation for entry into the reality of modern information relations. For each era, historical period, education was and remains a way of acquiring the foundations of cultural interaction in society. Today, paradoxically, as it sounds, given the globalization expansion of social contacts, information relations, the personal responsibility of a person is growing. Therefore, a special socially-constructing function is assigned to the resource of media education: to form media literacy, to prevent information threats, and to develop the intellectual, creative resource of a participant in communicative relations. Today it is difficult to predict all the dangers that humanity expects in such a radical transition to a historically new informational reality, but the basis for their prevention is the responsibility of each of us in mastering media competence and developing a culture of the information society.

## References

- [1] Akviniētis, T., 2009. Summa theologica II-II [Teologijos suma: II-II]. *Logos*, (59), pp.92–98.
- [2] Akvinský, T., 2011. Summa theologica: Part I, question 1, articles 1-10 [Suma Teologická: 1. časť, 1. otázka, 1.-10. článok]. *Filozofia*, 66(1), pp.83–99.
- [3] Al-Nasser, N.A., 2017. Media and information literacy as a means of preventing violent extremism. *UN Chronicle*, LIV(3), p.36. Available from: <https://doi.org/10.18356/76bc0556-en>.
- [4] Aquinas, T., 2015. Disputed questions on truth, question X (the mind), article i (is the mind, as containing within itself the image of the trinity, the essence of the soul or one of its powers?). *Sententiae*, 33(2), pp.177–189. Available from: <https://doi.org/10.22240/sent33.02.177>.
- [5] Aquinas, T., 2018. Summa theologica: “On the natural law”. *Philosophy: An Innovative Introduction: Fictive Narrative, Primary Texts, and Responsive Writing*. pp.111–113. Available from: <https://doi.org/10.4324/9780429498336>.
- [6] Aristotle, 1951. Precision in discussion. *Quarterly Journal of Speech*, 37(1), pp.10–10. Available from: <https://doi.org/10.1080/00335635109381632>.
- [7] Bacon, F., 2007. Sylva sylvarum: Or, a naturall historie (London: John Haviland and Augustine Mathewes, 1627). *Race in early modern england: A documentary companion*. pp.214–215. Available from: <https://doi.org/10.1057/9780230607330>.

- [8] Bacon, F., 2013. A new system of natural philosophy I. *The royal society: Concept and creation*. vol. 25, pp.20–62.
- [9] Banshchikov, V.M., Guskov, V.S. and Myagkov, I.F., 1967. *Myshleniye. Meditsinskaya psikhologiya (Thinking. Medical psychology)*. Moscow: Meditsina.
- [10] Beck, U., 1992. *Risk Society. Towards a New Modernity*. SAGE Publications Ltd.
- [11] Beck, U., 2020. Risk society. *Essential Concepts of Global Environmental Governance*. pp.219–221.
- [12] Buckingham, D., 1986. Against demystification: A response to ‘teaching the media’. *Screen*, 27(5), pp.80–95. Available from: <https://doi.org/10.1093/screen/27.5.80>.
- [13] Buckingham, D., 1992. Media education: The limits of a discourse. *Journal of Curriculum Studies*, 24(4), pp.297–313. Available from: <https://doi.org/10.1080/0022027920240401>.
- [14] Buckingham, D., 1993. Going Critical: The Limits of Media Literacy. *Australian Journal of Education*, 37(2), pp.142–152. Available from: <https://doi.org/10.1177/000494419303700203>.
- [15] Buckingham, D., 1995. Media Education and the Mediaindustries: Bridging the Gaps? *Journal of Educational Television*, 21(1), pp.7–22. Available from: <https://doi.org/10.1080/0260741950210102>.
- [16] Buckingham, D., 1995. The Commercialisation of Childhood? The Place of the Market in Children’s Media Culture. *Changing English*, 2(2), pp.17–40. Available from: <https://doi.org/10.1080/1358684950020202>.
- [17] Buckingham, D., 1996. Critical pedagogy and media education: A theory in search of a practice. *Journal of Curriculum Studies*, 28(6), pp.627–650. Available from: <https://doi.org/10.1080/0022027980280601>.
- [18] Buckingham, D., 1997. Dissin’ Disney: Critical perspectives on children’s media culture. *Media, Culture & Society*, 19(2), pp.285–293. Available from: <https://doi.org/10.1177/016344397019002010>.
- [19] Buckingham, D., 1997. News media, political socialization and popular citizenship: Towards a new agenda. *Critical Studies in Media Communication*, 14(4), pp.344–366. Available from: <https://doi.org/10.1080/15295039709367023>.
- [20] Buckingham, D., 1998. Media education in the UK: Moving beyond protectionism. *Journal of Communication*, 48(1), pp.33–43. Available from: <https://doi.org/10.1111/j.1460-2466.1998.tb02735.x>.
- [21] Buckingham, D., 1999. The Big Picture: Mapping Children’s Uses of Old and New Media. *Convergence: The International Journal of Research into New Media Technologies*, 5(4), pp.121–125. Available from: <https://doi.org/10.1177/135485659900500409>.
- [22] Buckingham, D., 1999. Young People, Politics and News Media: Beyond political socialisation. *Oxford Review of Education*, 25(1-2), pp.171–184. Available from: <https://doi.org/10.1080/030549899104198>.
- [23] Buckingham, D., 2003. Media Education and the End of the Critical Consumer. *Harvard Educational Review*, 73(3), pp.309–327. Available from: <https://doi.org/10.17763/haer.73.3.c149w3g81t381p67>.
- [24] Buckingham, D., 2006. Children and new media. *Handbook of New Media: Social Shaping and Social Consequences of ICTs*. pp.75–91. Available from: <https://doi.org/10.4135/9781446211304.n3>.
- [25] Buckingham, D., 2007. Childhood in the age of global media. *Children’s Geographies*, 5(1-2), pp.43–54. Available from: <https://doi.org/10.1080/14733280601108155>.
- [26] Buckingham, D., 2007. Digital Media Literacies: rethinking media education in the age of the Internet. *Research in Comparative and International Education*, 2(1).

- Available from: <https://doi.org/10.2304/rcie.2007.2.1.43>.
- [27] Buckingham, D., 2007. Media education goes digital: An introduction. *Learning, Media and Technology*, 32(2), pp.111–119. Available from: <https://doi.org/10.1080/17439880701343006>.
- [28] Buckingham, D., 2008. Children and media: A cultural studies approach. *The International Handbook of Children, Media and Culture*. pp.219–236. Available from: <https://doi.org/10.4135/9781848608436.n13>.
- [29] Buckingham, D., 2009. Beyond the competent consumer: the role of media literacy in the making of regulatory policy on children and food advertising in the UK. *International Journal of Cultural Policy*, 15(2), pp.217–230. Available from: <https://doi.org/10.1080/10286630802651602>.
- [30] Buckingham, D., 2009. A commonplace art? Understanding amateur media production. *Video Cultures: Media Technology and Everyday Creativity*. pp.23–50. Available from: <https://doi.org/10.1057/9780230244696>.
- [31] Buckingham, D., 2009. ‘Creative’ visual methods in media research: Possibilities, problems and proposals. *Media, Culture and Society*, 31(4), pp.633–652. Available from: <https://doi.org/10.1177/0163443709335280>.
- [32] Buckingham, D., 2013. Challenging concepts: Learning in the media classroom. *Current Perspectives in Media Education: Beyond the Manifesto*. pp.24–40. Available from: <https://doi.org/10.1057/9781137300218>.
- [33] Buckingham, D., 2013. Electronic child abuse? Rethinking the media’s effects on children. *Ill Effects: The Media Violence Debate*. pp.28–40. Available from: <https://doi.org/10.4324/9780203977514-6>.
- [34] Buckingham, D., 2013. Teaching the creative class? Media education and the media industries in the age of ‘participatory culture’. *Journal of Media Practice*, 14(1), pp.25–41. Available from: [https://doi.org/10.1386/jmpr.14.1.25\\_1](https://doi.org/10.1386/jmpr.14.1.25_1).
- [35] Buckingham, D., 2015. Defining digital literacy: What do young people need to know about digital media? *Nordic Journal of Digital Literacy*, 2015(4), pp.21–34.
- [36] Buckingham, D., 2016. Do we really need media education 2.0? Teaching media in the age of participatory culture. *Education and Social Media: Toward a Digital Future*. pp.171–186.
- [37] Buckingham, D., 2020. Epilogue: Rethinking digital literacy: Media education in the age of digital capitalism. *Digital Education Review*, (37), pp.230–239. Available from: <https://doi.org/10.1344/DER.2020.37.230-239>.
- [38] Bulger, M. and Davison, P., 2018. The Promises, Challenges, and Futures of Media Literacy. *Journal of Media Literacy Education*, 10(1). Available from: <https://doi.org/10.23860/JMLE-2018-10-1-1>.
- [39] Christ, W.G. and Potter, W.J., 1998. Media literacy, media education, and the academy. *Journal of Communication*, 48(1), pp.5–15. Available from: <https://doi.org/10.1111/j.1460-2466.1998.tb02733.x>.
- [40] Condillac, E.B., 1982. Sensations. *Philosophical writings of Etienne Bonnot, Abbé de Condillac*. Psychology Press, vol. 2, pp.436–442.
- [41] Copeland, P., 2016. Factual Entertainment: How to make media literacy popular. Available from: <https://www.lse.ac.uk/iga/assets/documents/arena/archives/factual-entertainment-how-to-make-media-literacy-popular-pdf-web.pdf>.
- [42] Descartes, R., 2010. Treatise on man. *The Nature of Life: Classical and Contemporary Perspectives from Philosophy and Science*. pp.15–20. Available from: <https://doi.org/10.1017/CBO9780511730191.005>.
- [43] Descartes, R., 2013. ‘The passions of the soul’: Part I. *Minds and Bodies: An Introduction with Readings*. pp.177–179.
- [44] Descartes, R., 2014. Discourse on method. *Essays and reviews: 1959-2002*. pp.26–28.

- [45] Descartes, R., 2014. Principles of philosophy (selections). *Philosophy, Science, and History: A Guide and Reader*. pp.254–281. Available from: <https://doi.org/10.4324/9780203802458>.
- [46] Descartes, R., 2018. Finding a foundation for knowledge. *Philosophy: An Innovative Introduction: Fictive Narrative, Primary Texts, and Responsive Writing*. pp.126–137. Available from: <https://doi.org/10.4324/9780429498336>.
- [47] Dewey, J., 1997. *How We Think*. New York: Digireads.com Publishing.
- [48] Grizzle, A., Moore, P., Dezuanni, M., Wilson, C., Asthana, S., Banda, F., Onumah, C. and Torras, M.C., 2013. *Media and information literacy: policy and strategy guidelines*. Paris: UNESCO - United Nations Educational, Scientific and Cultural Organization. Available from: <https://unesdoc.unesco.org/ark:/48223/pf0000225606>.
- [49] Hobbs, R., 2015. Media Literacy. *Oxford research encyclopedia of communication*. Available from: <https://doi.org/10.1093/acrefore/9780190228613.013.11>.
- [50] Hobbs, R., 2017. Chapter 13 - measuring the digital and media literacy competencies of children and teens. In: F.C. Blumberg and P.J. Brooks, eds. *Cognitive development in digital contexts*. San Diego: Academic Press, pp.253–274. Available from: <https://doi.org/10.1016/B978-0-12-809481-5.00013-4>.
- [51] Hobbs, R. and Jensen, A., 2009. The Past, Present, and Future of Media Literacy Education. *Journal of Media Literacy Education*, 1(1). Available from: <https://digitalcommons.uri.edu/jmle/vol1/iss1/1>.
- [52] Iyer, S.S., Gernal, L., Subramanian, R. and Mehrotra, A., 2023. Impact of digital disruption influencing business continuity in UAE higher education. *Educational Technology Quarterly*, 2023(1), p.18–57. Available from: <https://doi.org/10.55056/etq.29>.
- [53] James, W., 2001. *Psychology: The briefer course*. Dover Publications. Available from: <http://psylib.org.ua/books/james02/index.htm>.
- [54] James, W., 2007. *The principles of psychology*, vol. 1. Cosimo, Inc.
- [55] Luhmann, N., 1992. What is Communication? *Communication Theory*, 2(3), pp.251–259. Available from: <https://doi.org/10.1111/j.1468-2885.1992.tb00042.x>.
- [56] Manovich, L., 2001. *The Language of New Media*. The MIT Press. Available from: [https://dss-edit.com/plu/Manovich-Lev\\_The\\_Language\\_of\\_the\\_New\\_Media.pdf](https://dss-edit.com/plu/Manovich-Lev_The_Language_of_the_New_Media.pdf).
- [57] Miller, A.L., 2022. Adapting to teaching restrictions during the COVID-19 pandemic in Japanese universities. *Educational Technology Quarterly*, 2022(3), p.251–262. Available from: <https://doi.org/10.55056/etq.21>.
- [58] NATO StratCom COE, 2018. The News Hero. Available from: <https://www.stratcomcoe.org/news-hero>.
- [59] Paul, R.W., Elder, L. and Bartell, T., 1997. *California Teacher Preparation for Instruction in Critical Thinking: Research Findings and Policy Recommendations*. Sacramento: Foundation for Critical Thinking.
- [60] Potter, W.J., 2004. Argument for the need for a cognitive theory of media literacy. *American Behavioral Scientist*, 48(2), pp.266–272. Available from: <https://doi.org/10.1177/0002764204267274>.
- [61] Potter, W.J., 2004. *Theory of Media Literacy: A Cognitive Approach*. Available from: <https://doi.org/10.4135/9781483328881>.
- [62] Potter, W.J., 2010. The state of media literacy. *Journal of Broadcasting and Electronic Media*, 54(4), pp.675–696. Available from: <https://doi.org/10.1080/08838151.2011.521462>.
- [63] Potter, W.J., 2016. *How to think about media literacy*. SAGE Publications. Available from: <https://us.sagepub.com/sites/default/files/upm-binaries/>

[71812PotterChapter2.pdf](#).

- [64] Potter, W.J., 2020. Four fundamental challenges in designing media literacy interventions. *Media Literacy in a Disruptive Media Environment*. pp.57–74.
- [65] Potter, W.J. and Thai, C., 2016. Conceptual challenges in designing measures for media literacy studies. *International Journal of Media and Information Literacy*, 1(1), pp.27–42. Available from: <https://doi.org/10.13187/ijmil.2016.1.27>.
- [66] Potter, W.J. and Thai, C.L., 2019. Reviewing media literacy intervention studies for validity. *Review of Communication Research*, 7(2019), pp.1–29. Available from: <https://doi.org/10.12840/ISSN.2255-4165.018>.
- [67] Shekhavtsova, S., Koknova, T. and Shekhavtsov, M., 2021. Using web technologies in the process of development of students' critical thinking. *Educational Technology Quarterly*, 2021(2), p.310–330. Available from: <https://doi.org/10.55056/etq.28>.
- [68] Tsitaty izvestnykh lichnostey [Quotes of famous personalities], 2021. Available from: <https://ru.citaty.net/tsitaty/636377-aristotel-myshlenie-verkh-blazhenstva-i-radost-zhizni-dobles/>.
- [69] UNESCO, 2020. Stop COVID-19 disinformation at the root with media and information literacy. Available from: <https://en.unesco.org/news/stop-covid-19-disinformation-root-media-and-information-literacy>.
- [70] UNICEF Croatia, 2020. Increased interest for the media literacy during COVID-19 pandemic. Available from: <https://www.unicef.org/croatia/en/press-releases/increased-interest-media-literacy-during-covid-19-pandemic>.