Published in the USA
Media Education (Mediaobrazovanie)
Issued since 2005.
ISSN 1994-4160
E-ISSN 1994-4195
2025. 21(4): 596-605

DOI: 10.13187/me.2025.4.596
https://me.cherkasgu.press

Utilization of Media Space in Student Education

Elena Abramenko [a, *], Sergey Abramenko [a]

[a] Volgograd State Technical University, Russian Federation

Abstract

The effective use of media space in higher education institutions fosters modern competencies among graduates, preparing them for professional activities in an informatized society. The key condition for successful integration of media resources is the availability of high-quality technical infrastructure, professional personnel, and continuous monitoring of audience needs. This article examines the role and potential of media space in the educational environment of contemporary higher education institutions. Various forms of integrating media resources into the educational process are explored, including video lectures, e-textbooks and digital libraries, virtual (VR) and augmented (AR) reality technologies, cloud services, digital archives, neural networks, interactive platforms, and social media, among others. The authors emphasize the positive aspects of media technologies, such as increased interest in the subject, development of student independence and responsibility, expansion of the informational field, and improvement of information analysis skills.

The authors stress the necessity of a systemic approach to integrating media space, which includes modernizing the digital infrastructure of universities, training faculty, and developing methodological support. A specific example of successful media resource implementation in a Cultural Studies course is provided. The article is of interest to researchers in media pedagogy, educational program developers, and higher education instructors involved in integrating digital technologies into the educational process.

Keywords: media space, media education, digital educational resources, media competence, students, higher education.

1. Introduction

The modern educational environment is significantly influenced by information technologies and digital tools, among which media space holds a special place. Media space encompasses various communication formats-from traditional print media and television to contemporary online resources, social networks, and mobile applications. It significantly impacts the formation of worldviews, cognitive abilities, and communicative competencies of learners. The advantages of educational media space are considered by the author in the following aspects.

First, the accessibility of educational resources allows students to access textbooks, lectures, scientific articles, videos, and other materials available online, thereby expanding the boundaries of the traditional educational process. Second, the use of media space fosters students' ability to analyze information, assess its reliability, and evaluate the credibility of sources. For example, working with news feeds, scientific publications, and analytical materials helps students form their

* Corresponding author
E-mail addresses: abramella@list.ru (E.V. Abramenko)

own opinions and develop argumentation skills. Third, information culture includes the ability to effectively search, process, and utilize information. Modern students actively engage with various information sources, necessitating the development of media literacy skills. The ability to navigate the information flow becomes a crucial component of professional training for future specialists.

Finally, modern educational platforms enable interactive classes, webinars, forums, and other forms of interaction between students and instructors. Such tools enhance student motivation, improve the quality of material assimilation, and foster an active role in educational activities. The author agrees with researchers A. Mokina and L. Khoronko: the future of education lies in hybrid (online-offline) forms of interactive education, which is key to the success of higher education. Disciplines enriched with media content-such as presentations, video and audio materials, and even educational web quests-exemplify this trend (Mokina, Khoronko, 2023).

However, educational media space requires careful organization, systematic updates, and continuous quality control of the content used.

The authors of this article view educational media space as a specially organized system of information and communication resources and technologies aimed at supporting the educational process in universities. It includes diverse channels for disseminating and delivering educational information, helping to optimize teaching methods and develop the necessary skills for students.

2. Materials and methods

The material for this study is based on contemporary Russian and international scholarly publications on media education. The research methods include analysis and synthesis of scholarly literature on the topic, as well as student surveys.

3. Discussion

The development of media competence among Russian citizens is guided by Presidential Decree No. 203 of May 9, 2017, *On the Strategy for the Development of the Information Society in the Russian Federation for 2017–2030* (Ukaz..., 2017). It outlines essential actions, among which the most effective include: forming a safe information environment by promoting informational resources; developing the National Electronic Library and other state information systems to ensure broad access; adopting measures to effectively use modern information platforms for disseminating accurate and high-quality information; ensuring the availability of legal, high-quality media products and services; and supporting traditional media (radio, television, print media, and libraries) (Gálik, 2020; Gáliková Tolnaiová, Gálik, 2020; Shamigulova, Vasilina, 2023). It can be correlated with the goal of modern media education, aimed at the development of creative, communication skills, critical thinking, perception, interpretation, analysis and evaluation of media texts, teaching various forms of expression with the help of media technology (Fedorov, 2001: 38).

Media content plays a pivotal role in the contemporary higher education system, significantly influencing various aspects of academic activities and interactions among participants in the educational process. Media literacy and media competence are now essential across nearly all fields of study. Moreover, education in mass media is regarded as an integral part of modern education. Media competence can be defined as the ability to use media for personal purposes, independently understand and critically evaluate media content, and transmit, create, and disseminate media texts (Shamigulova, Vasilina, 2023).

Media literacy is defined by various terms, including *media pedagogy*, *media education*, *educational media, digital (new media) literacy* or *skills*. In general, media literacy is the training of media users, i.e. an educational approach aimed at raising students' awareness of how the media work, how they are created, how they are structured and how they are used for the development of society (Afrilyasanti et al., 2023).

To define the concept of media literacy, it is necessary to contact A.V. Fedorov, a leading specialist in the field of media education. In the scientific work of the authors, media literacy is understood as a set of motives, knowledge, skills, and abilities (criteria: motivational, contact, informational, perceptual, interpretative-evaluative, practical-operational, creative) that contribute to selection, use, and critical analysis, evaluation, creation and communication of media texts in various forms, types and genres, analysis of complex processes of media functioning in society. (Levitskaya, Fedorov, 2021). According to this definition, media literacy includes the competencies necessary to become an informed media consumer (Cho et al., 2024).

Scholars in pedagogy (Goncharova, 2021; Musifullin, 2023; Shamigulova, 2022) view media competence as a system of knowledge, skills, and abilities for working with information, effectively interacting with media space, and engaging with media texts.

Let us examine in detail how media content is utilized in universities and its advantages and disadvantages in the educational environment.

Analyzing domestic and international works, we identified the primary components of educational media space:

– Electronic educational materials (texts, manuals, notes) (Sergeeva, Zyukin, 2016).

– Video and audiovisual resources (films, *VK video*) (Abramenko, 2022).

– Interactive platforms (forums, blogs, chats, social networks, professional communities) (Goryachev i dr., 2015).

– Distance courses and electronic libraries (*EOS courses*, *Moodle*, *Lan EBS*, *elibrary.ru*) (Dorozhkin, Izyurova, 2022).

– Online simulators and programs for independent workshops.

– Mobile applications and self-education portals (*Stepik*) (Yaskievich, 2019).

– Gamification and game-based methods (educational quests, *Joyteka* quizzes) (Abramenko i dr., 2024; Ukrozhenko i dr., 2024).

– Digital laboratories and simulators (*Labster*) (Schechter et al., 2024).

– Cloud services and digital archives (*Yandex Disk*, *Google Drive*, *Mail.ru Cloud*, *Google Docs*, *Google Slides*) (Isaev, Plekhanova, 2015).

– Virtual (VR) and augmented (AR) reality technologies (*Kvantoriums, IT Cubes*) (Gorbunova, 2023; Polevoda i dr., 2022).

– Neural networks (*DeepSeek*, *GigaChat*) (Samarina, Boyarinov, 2023).

– Educational platforms (*Classcraft, CENTURY*).

– Text generation and processing (*GigaChat*, *YandexGPT 3*, *Perplexity*, *ChatPDF*).

– Image generation and transformation (*Kandinsky 3.1*, *Shedevrum*, *Waifu2x*, *Hama*).

– Music generation and video editing (*Recut*, *Suno*, *Adobe Podcast*, *Sunno AI/Udio*).

– Presentation creation (*Gamma*, *MyLens.AI*, *Kwizie*, *Character AI*).

In our opinion, the optimal solution is a balanced combination of traditional pedagogy and the media space, which maintains a balance between individual learning and high-quality organization of the educational process. In addition, the use of social networks in media education is possible, as evidenced by the data of the *Russian Public Opinion Research Center* (VCIOM, 2023). About 86 % of Russian residents visit social networks almost every day; 92 % of young people aged 18 to 24, 94 % of those aged 25-34, and the proportion of daily users in the 18-34 age group is close to absolute.

It should be noted that the use of the media space in students' education brings significant advantages such as accessibility and flexibility, but it also poses a number of serious challenges that require careful planning and supervision by teachers (Table 1).

Table 1. Media space in education: advantages and disadvantages

№	*Advantages of media space in education*	*Disadvantages of media space in education*
1	*Increased interest in the subject*. The use of multimedia tools (videos, infographics, interactive tasks, gamification) enhances student engagement and improves comprehension and retention of material.	*Information overload*. The digital environment provides excessive amounts of data, complicating systematization and prioritization, which hinders holistic understanding of the subject.
2	*Personalized learning*. Students can choose their own pace, revisit challenging topics, rewatch lectures, and access supplementary resources tailored to their level. Media technologies enable self-directed learning paths and progress monitoring.	*Reduced instructor-student interaction*. Online education often diminishes face-to-face contact, negatively impacting learning quality. Insufficient feedback may lower knowledge retention.

№	*Advantages of media space in education*	*Disadvantages of media space in education*
3	*Expanded information access.* Students are provided with free access to a wide range of information sources (digital libraries, online scientific resources, open educational platforms), which opens up the opportunity to get acquainted with the latest scientific achievements, expert assessments and develop the ability to critically evaluate information.	*Low content quality control.* The internet contains unverified or false information, complicating student work and undermining knowledge reliability.
4	*Enhanced communication experience.* Expanding communication opportunities through the use of various media channels – chats, messengers, blogs, wiki platforms, e-mail, educational portals and learning management systems (LMS), social networks, web conferences and video chats, forums and blog platforms, collaboration environments (Google Docs, Dropbox Paper) podcasts and audio messages — contribute to the development of competencies in the field of group cooperation and productive information exchange.	*Self-discipline challenges.* Flexible schedules and independent study may reduce accountability, leading to task delays and lower academic efficiency.
5	*Development of digital competencies.* Engaging with media content cultivates digital literacy, preparing students for a technology-driven society with constant information flow.	*Technical issues.* Connectivity problems, limited internet access, or inadequate hardware create barriers to resource utilization and task completion.

The integration of media space into student education relies on a systemic approach encompassing the modernization of university digital infrastructure, faculty training, and methodological development. Modernizing digital infrastructure involves adopting contemporary media resources and creating a unified electronic educational environment. Faculty training includes professional development programs, workshops, and courses on modern information technologies. For instance, the authors of this article annually complete training courses on IT integration, such as *Digital Instructor: Integrating AI, EOS, and Online Services into Education* (2025). Methodological support entails designing teaching guides, compiling lesson plans and didactic materials, and establishing experimental platforms for testing innovative approaches.

Preparing instructors to effectively utilize media space in higher education is crucial, as modern technologies demand specific skills and teaching methods. Let's consider the stages of formation of the faculty's readiness to use the media space.

Stage 1. Initial diagnosis and examination of professional readiness

Teaching staff carry out an initial assessment of their level of competence in the field of modern information and communication technologies and media capabilities. This stage provides for diagnostics in the following areas:

– Possession of computer equipment and digitalization of processes;

– Practical skills in handling office software, specialized software, and a content administration system;

– Willingness to implement information technology solutions in educational activities;

– Experience using media resources and online services in education.

Stage 2. Theoretical and methodological development of media pedagogy

Teaching staff need to undergo an in-depth study of the theoretical foundations and methodology of media pedagogy, which covers key concepts, principles and mechanisms for developing educational media resources, providing an understanding of the patterns of designing effective learning environments in the media space.

Recommended: Attend specialized workshops, review academic literature, and complete professional development courses.

Stage 3. Selection of optimal tools

Educators choose appropriate technological platforms to implement pedagogical approaches:

– *LMS* (Learning Management Systems): *Moodle, Blackboard, Google Classroom*;

– *visualization tools*: *Prezi, PowerPoint, Adobe Spark;*

– *video platforms*: *Rutube, Vimeo;*

– *social networks & messengers*: *Telegram, WhatsApp, VKontakte.*

Stage 4. Design of educational media process

This critical stage involves course development for digital formats:

– defining learning objectives;

– creating lesson plans incorporating multimedia elements;

– curating appropriate media content (videos, audio, illustrations, infographics);

– planning feedback mechanisms and interim assessments.

Stage 5. Implementation and progress monitoring

When integrating media resources:

– regularly track student progress;

– collect feedback to identify strengths/weaknesses;

– adapt teaching methods based on audience psychology;

– make timely adjustments to the educational process.

Stage 6. Methodology refinement and continuous learning

To maintain educational quality:

– continuously update knowledge and skills;

– attend academic conferences;

– review specialized journals;

– collaborate with peers;

– explore new approaches to media space utilization.

4. Results

Educational media space is an integrated system of informational channels and platforms used in the academic process to transmit, store, and process educational content. Its structure encompasses diverse media formats and organizational methods, creating optimal conditions for knowledge acquisition and professional skill development. Offering targeted training programs and resources can empower teachers to deliver high-quality media literacy education (Livingstone, Bulger, 2020).

Thus, the innovative media space of the modern educational system opens up large-scale horizons for the implementation of a holistic approach to learning, activating the active acquisition of knowledge by students in disciplines, providing a detailed immersion in theory and practice. A key outcome of our theoretical research is the developed Cultural Studies lesson incorporating media resources.

Case Study: *Media Space Implementation in a Cultural Studies Course* (Figure 1, Table 2).

Topic: *History of 19th-Century Russian Culture*.

Course objectives:

– Introduce students to key stages in the development of Russian culture during the 19th century.

– Analyze the era's influence on literature, music, visual arts, architecture, and theater, with comparisons to modernity.

– Cultivate skills in analyzing cultural phenomena, comparing facts, and drawing conclusions.

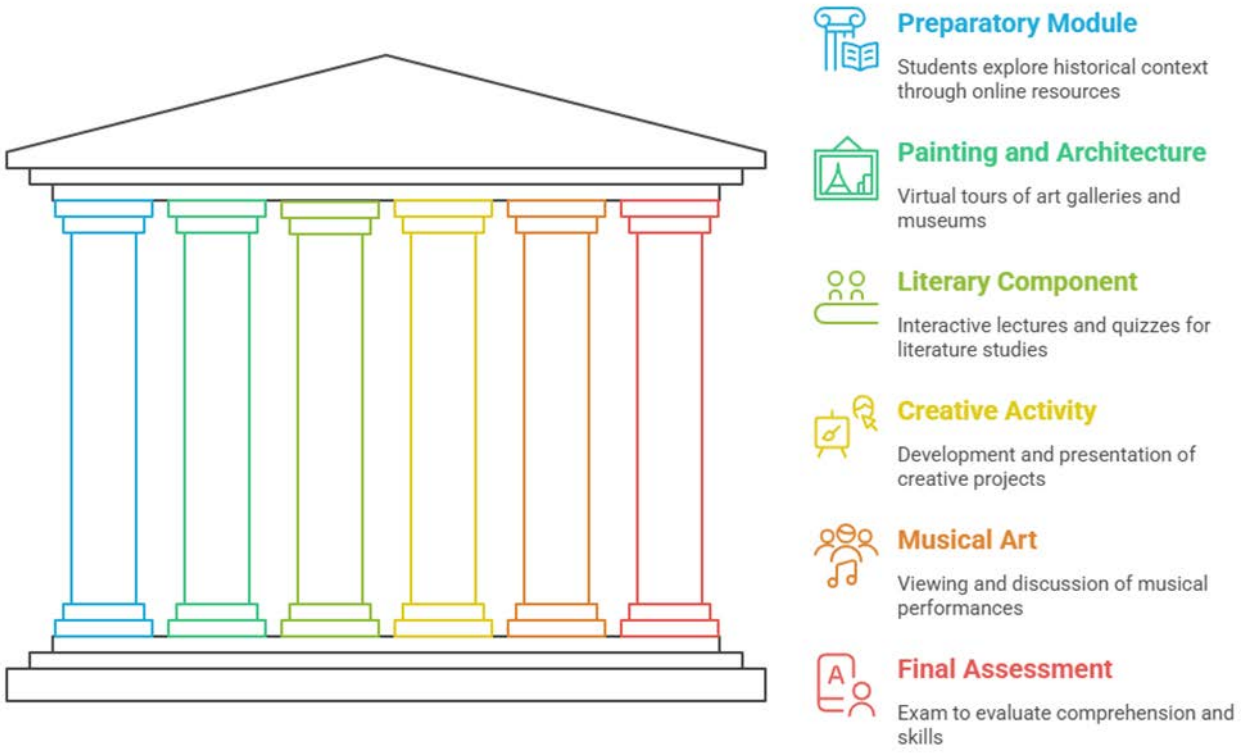

Fig. 1. Lesson Structure

Table 2. Lesson Structure and Digital Resources

Stage	*Lesson structure*	*Digital tools*
1	Preparatory (online module) Students, using a series of short video clips, infographics and documentaries. form an idea of the social environment of the era, shaping the artistic world of the great Russian authors	Electronic course: *Eos2.vstu.ru* *Videos: Rutube.ru, VKvideo*
2	Literary component (interactive lectures) The teacher conducts a remote lecture, accompanied by the demonstration of illustrative material (portraits of writers, manuscripts of works), audio recordings of the voices of famous actors reading excerpts from classic works (for example, *Eugene Onegin*, *War and Peace*). After the lecture, a quiz is held in the format of an interactive test with the selection of the correct answer.	Lecture: *MTS Link* Videos: *Rutube.ru, VKvideo* Presentation: *Gamma.app* Quiz: *Joyteka*
3	Musical art (video fragments) Viewing fragments of operas (e.g. *Boris Godunov*), ballets (e.g. *The Nutcracker*), and symphonic concerts recorded by professional orchestras. Discussion of musical images, characteristic features of the creativity of 19th-century composers is offered.	Videos: *Rutube.ru, VKvideo*
4	Painting and architecture (overview of museum collections). Organize a virtual tour of art galleries and museums in Russia (for example, the Tretyakov Gallery). Using high-resolution panoramas, students can explore	*Tretyakov gallery*: *my.tretyakov.ru* *Classical painting (digitized collections of*

Stage	*Lesson structure*	*Digital tools*
	the works of leading artists, study painting styles, and examine architectural landmarks from the period.	*the hermitage in Google Arts and Culture)* *Culture.RF* *Russian museum: rusmuseum.ru*
5	Creative activity (project activities). Students develop their own creative projects: presentations, essays, and mini-research on a chosen topic of 19th-century art. The work is carried out individually or in groups, and a cloud-based service is used for collaborative development and presentation of the project to the audience.	Text generation: *Deepseek* Picture and video generation: *GigaChat, Masterpiece* Group communication: *VKchat* Project protection: *MTS Link, Yandex Telemost, Google Meet* Creating diagrams and pictures: *Napkin.ai* Creating presentations: *Canva*
6	Final assessment (examination testing). The final exam is conducted in the form of a computer-based test with open-ended questions and tasks involving the interpretation of a literary text, a piece of music, or a painting.	Electronic course: *Eos2.vstu.ru* Interactive online *whiteboard (miro.com)*

This approach fosters active student participation, independent knowledge acquisition, and 21st-century competencies: digital literacy, creativity, critical thinking, and collaboration.

The research analysis provides an opportunity to evaluate the experience of students and teachers in the field of media education, who note: accessibility of educational information and its rapid addition to new educational material (Chtena, 2021), increased student engagement and preparedness (Nagashima, Hrach, 2021), successful use of mixed learning (Machado et al., 2024), discussion of equal conditions for Internet users in the online learning process (Ferguson et al.,2024), content authenticity (Boler et al., 2025) and methods of combating misinformation in education (Pérez et al., 2025), preparation for work in the modern information space (Kruse, 2024; Brown, Croft, 2020).

Following the authors, we believe that the widespread practical implementation of media education requires the consolidation of pedagogical universities, universities, journalism faculties, libraries, media libraries, media educators, and the media community, as well as the coordination of interaction between government agencies, existing media education centers, and experimental platforms in this field (Fedorov, 2020).

5. Conclusion

The theoretical study confirms the significant pedagogical potential of media resources in higher education. Analysis of contemporary practices yields the following conclusions:

1. Media resources have become integral to education, serving functions such as:
– Interactive learning (video lectures, podcasts, webinars).
– Visualizing complex concepts (infographics, 3D modeling).
– Developing professional skills (simulators, VR labs).
2. The instructor's role is evolving from knowledge transmitter to media pedagogue, capable of:
– Designing and adapting digital content.
– Effectively integrating media technologies into curricula.

– Fostering student media literacy.

3. Systemic use of media resources offers key benefits:

– Increased student motivation and engagement.

– Personalized learning opportunities.

– Enhanced critical thinking and media competence.

The analysis reveals that media resources create an interactive learning environment, diversifying content delivery through videos, presentations, online courses, and virtual labs. However, challenges include the need for faculty IT training, technical infrastructure, and high-quality digital content.

Thus, effective implementation requires a holistic approach: methodological guidelines, faculty development, and infrastructure support. Further research will refine models for integrating media resources into higher education.

By embedding media literacy into core curricula, equipping educators with resources, and addressing technological inequities, education systems can cultivate informed, ethical, and engaged digital citizens. Collaboration among policymakers, educators, and media organizations is essential for sustainable, inclusive frameworks (UNESCO, 2021).

6. Acknowledgments

The authors would like to thank the anonymous reviewers for their careful reading of the article and valuable comments.

References

Abramenko i dr., 2024 – *Abramenko, E.V., Sitnikova, O.I., Fedotova, L.A.* (2024). Obrazovatel'nyy kvest kak sredstvo formirovaniya istoricheskogo soznaniya u studentov neistoricheskikh spetsial'nostey vysshey shkoly [Educational quest as a tool for shaping historical consciousness among non-history majors in higher education]. *Nizhegorodskoe obrazovanie*. 1: 84-93. [in Russian]

Abramenko, 2022 – *Abramenko, E.V., Abramenko, S.A.* (2022). Kinotrening kak metod formirovaniya patrioticheskikh chuvstv u studentov vysshchei shkoly [Cinema training as a method of fostering patriotic feelings among higher education students]. *Primo Aspectu*. 4(52): 125-132. DOI: 10.35211/2500-2635-2022-4-52-125-132 [in Russian]

Afrilyasanti et al., 2023 – *Afrilyasanti, R., Basthomi, Ya., Zen, E.L.* (2023). Factual vs. fake news: Teachers' lens on critical media literacy education in EFL classes. *Journal of Interactive Media in Education*. 1: 1-16. DOI: 10.5334/jime.781

Boler et al., 2025 – *Boler, M., Gharib, H., Kweon, Y.Ji.* et al. (2024). Promoting mis/disinformation literacy among adults: a scoping review of interventions and recommendations. *Communication Research*. 1-30. DOI: 10.1177/00936502251318630

Brown, Croft, 2020 – *Brown, M., Croft, B.* (2020). Social annotation and an inclusive praxis for open Pedagogy in the college classroom. *Journal of Interactive Media in Education*. 1: 1-8. DOI: 10.5334/jime.561

Cho et al., 2024 – *Cho, H., Cannon, J., Lopez, R., Li, W.* (2024). Social media literacy: a conceptual framework. *New Media & Society*. 26(2): 941-960. DOI: 10.1177/14614448211068530

Chtena, 2021 – *Chtena, N.* (2021). Opening art history: exploring the motivations and practices of faculty using open educational resources in lower-level and general education art history courses. *Journal of Interactive Media in Education*. 1. [Electronic resource]. URL: https://jime.open.ac.uk/articles/10.5334/jime.677

Dorozhkin, Izyurova, 2022 – *Dorozhkin, E. M., Izyrova, Ya. S.* (2022). Rol' elektronnoj informatsionno-obrazovatel'noj sredy v sisteme vysshego obrazovanija [The role of the electronic information and educational environment in the higher education system]. *Vestnik Moskovskogo gosudarstvennogo oblastnogo universiteta. Seriya: Pedagogika.* 2*:* 71-85. DOI: 10.18384/2310-7219-2022-2-71-85 [in Russian]

Fedorov, 2001 – *Fedorov, A.V.* (2001). Mediaobrazovanie: istoriya, teoriya i metodika [Media education: history, theory and methodology]. Rostov. [in Russian]

Fedorov, Levitskaya, 2020 – *Fedorov, A., Levitskaya, A.* (2020). Mediaobrazovatel'nye orientiry v stranakh SNG: prognoz na budushchee [Media education benchmarks in the CIS countries: forecast for the future]. *Crede Experto*. 1: 118-128. [in Russian]

Ferguson et al., 2024 – *Ferguson, R., Perryman, L.A., Ball, S.J.* (2024). The importance of offline options for online learners. *Journal of Interactive Media in Education*. 1: 16. DOI: 10.5334/jime.898

Gálik, 2020 – *Gálik, S.* (2020). Thinking in the network. *Central European Journal of Communication*. 27(3): 446-459. DOI: 10.51480/1899-5101.13.3(27).9

Gáliková Tolnaiová, Gálik, 2020 – *Gáliková Tolnaiová, S.*, Gálik, S. (2020). Cyberspace as a new living world and its axiological contexts. In: Abu-Taieh, E., Mouatasim, A., Al Hadid, I.H. (eds.). *Cyberspace*. London. Pp. 39-52.

Goncharova, 2021 – *Goncharova, T.A.* (2021). Pedagogicheskie printsipy formirovaniya mediakompetentnosti studentov vuza [Pedagogical principles of developing media competence among university students]. *Vestnik Yuzhno-Ural'skogo gosudarstvennogo gumanitarno-pedagogicheskogo universiteta*. 6: 43-49. [in Russian]

Gorbunova, 2023 – *Gorbunova, N.V.* (2023). Primenenie tekhnologij virtual'noj real'nosti v kontekste professional'nogo obrazovanija [Application of virtual reality technologies in professional education]. *Problemy sovremennogo pedagogicheskogo obrazovanija*. 79(1): 131-134. [in Russian]

Goryachev i dr., 2015 – *Goryachev, M.D., Goryachev, M.M., Ivanushkina, N.V., Mantulenko, V.V.* (2015). Ispol'zovanie social'nykh setej v obuchenii studentov [Using social networks in student education]. *Vestnik Samarskogo gosudarstvennogo universiteta*. 7(129): 174-177. [in Russian]

Isaev, Plekhanova, 2015 – *Isaev, A.A., Plekhanova, T.M.* (2015). Povyshenie rezultativnosti samostoyatel'noj raboty studentov putem vnedreniya tekhnologii oblachnyh hranilishch [Improving the effectiveness of student independent work by introduction of cloud storage technology]. *Vestnik Samarskogo gosudarstvennogo tekhnicheskogo universiteta. Seriya: Psikhologo-pedagogicheskie nauki*. 2(26): 70-78. [in Russian]

Kruse et al., 2024 – *Kruse, J. Voss, S., Easter, Ja.* et al. (2024). Preparing students for the modern information landscape and navigating science–technology–society issues. *Journal of Research in Science Teaching*. 62(3): 792-824. DOI: 10.1002/tea.21972

Levitskaya, 2021 – *Levitskaya, A., Fedorov, A.* (2021). Criteria and methods for assessing the effectiveness of activities, contributing to the development of students' media competence in the process of analyzing media manipulative influences. *International Journal of Media and Information Literacy*. 6(1): 129-145. DOI: 10.13187/ijmil.2021.1.129

Livingstone, Bulger, 2020 – *Livingstone, S., Bulger, M.* (2020). Media literacy: An essential component of digital citizenship. *Journal of Learning, Media and Technology*. 45(2): 1-14. DOI: 10.1080/17439884.2020.1707212

Machado et al., 2024 – *Machado, C., Hsiao, P.Y., Vaccaro, Ch., Baker, Ch.* (2024). Entering the social media stratosphere: higher education faculty use of social media with students across four disciplines. *Journal of Interactive Media in Education*. 1: 1-17. DOI: 10.5334/jime.854

Mokina, Khoronko, 2023 – *Mokina, A.Yu., Khoronko, L.Ya.* (2023). Mehhanizmy formirovaniya mediasredy v obrazovatel'nom prostranstve vuza [The mechanisms of formation of the media environment in the educational spaces of the university]. *Kant*. 4(49): 363-368. [in Russian]

Musifullin, 2023 – *Musifullin, S.R.* (2023). Formirovanie mediagramotnosti studentov pedagogicheskogo vuza v usloviyah transformacii obrazovatel'nogo processa [Education of pedagogical university students on media competence under the conditions of the transformation of the educational process]. *Science for Education Today*. 13(1): 7-27. DOI: 10.15293/2658-6762.2301.01 [in Russian]

Nagashima, 2021 – *Nagashima, T., Hrach, S.* (2021). Motivating factors among university faculty for adopting open educational resources: incentives matter. *Journal of Interactive Media in Education*. 1. DOI: 10.5334/jime.678

Pérez et al., 2025 – *Pérez, G., Henderson, T., Wendell, K.B.* (2025). Addressing media and information literacy in engineering design education: learning to design technologies in the era of science denial and misinformation. *Journal of Research in Science Teaching*. 62(6): 1546-1579. DOI: 10.1002/tea.22023

Polevoda i dr., 2022 – *Polevoda, I.I., Ivanitsky, A.G., Mikhanovich, A.S., et al.* (2022). Tekhnologii virtual'noj i dopolnennoj real'nosti v obrazovatel'nom procese [Virtual and augmented reality technologies in the educational process]. *Vestnik Universiteta grazhdanskoĭ zashchity MChS Belarusi*. 1: 119-140. [in Russian]

Samarina, Boyarinov, 2023 – *Samarina, A.E., Boyarinov, D.A.* (2023). Nejroseti dlja generatsii izobrazhenij: pedagogicheskij potencial v vysshem obrazovanii [Neural networks for image-generating: pedagogical potential in higher education]. *Concept*. 11: 161-179. [in Russian]

Schechter, et al., 2024 – *Schechter, R., Gross, R., Cai, J.* (2024). Exploring nationwide student engagement and performance in virtual lab simulations with Labster. *Proceedings of EdMedia + Innovate Learning*. 871-878. *Brussels, Belgium: Association for the Advancement of Computing in Education (AACE)*. [Electronic resource]. URL: https://www.learntechlib.org

Sergeeva, Zyukin, 2016 – *Sergeeva, N.M., Zyukin, D.A.* (2016). Ispol'zovanie ehlektronnyh uchebnyh posobiy v obrazovatel'nom processe [Using electronic study guides in the educational process]. *Sovremennaya pedagogika*. 8: 27-30. [in Russian]

Shamigulova, 2022 – *Shamigulova, O.A.* (2022). Informacionno-prosvetitel'skaya deyatel'nost' kak uslovie formirovaniya mediagramotnosti u obuchayushchikhsya [Information and educational activities as a condition for the formation of media literacy among students]. *Sovremennye problemy nauki i obrazovaniya*. 6: 48-59. [in Russian]

Shamigulova, Vasilina, 2023 – *Shamigulova, O.A., Vasilina, D.S.* (2023). Formirovanie mediakompetentnosti v usloviyah vuza: analiz mnenij studentov – budushchih pedagogov [Formation of media competence at higher educational institutions: analysis of students – future teachers's opinions]. *Perspektivy nauki i obrazovania – Perspectives of Science and Education*. 3(63): 50-70. DOI: 10.32744/pse.2023.3.3 [in Russian]

Ukaz..., 2017 – Ukaz Prezidenta Rossiyskoy Federatsii ot 09.05.2017 g. № 203 O Strategii razvitiya informatsionnogo obshchestva v Rossiyskoy Federatsii na 2017–2030 gody [Decree of the President of the Russian Federation dated 09.05.2017 No. 203 On the Strategy for the Development of the Information Society in the Russian Federation for 2017 – 2030]. [Electronic resource]. URL: http://www.kremlin.ru/acts/bank/41919 [in Russian]

Ukrozhenko i dr., 2024 – *Ukrozhenko, D.S., Neverova, O.P., Stepanov, A.V. i dr.* (2024). Gejmifikaciya v vysshem obrazovanii: vlijanie igrovyh podhodov na motivaciju i akademicheskie dostizhenija studentov [Gamification in higher education: the impact of gamebased approaches on students' motivation and academic achievement]. *Pravo i upravlenie*. 12: 479-483. [in Russian]

UNESCO, 2021 – UNESCO. Media and information literacy for everyone and by everyone: a call to action. 2021. [Electronic resource]. URL: https://unesdoc.unesco.org /ark:/48223/pf0000379177

VCIOM, 2023 – VCIOM. Sotsialnye seti i messendzheri: vlozhennost' i predpochteniya [Social media and messengers: engagement and preferences]. 2023. [Electronic resource]. URL: https://wciom.ru/analytical-reviews/analiticheskii-obzor/socialnye-seti-i-messendzhery-vovlechennost-i-predpochtenija [in Russian]

Yaskievich, 2019 – *Yaskievich, M.I.* (2019). Massovye otkrytye onlayn-kursy kak glavnaya tendenciya razvitiya obrazovaniya [Massive open online courses as the main trend of education development]. *Kul'turnoe nasledie Rossii*. 2: 79-84. [in Russian]