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PSYCHOLOGICAL AND PEDAGOGICAL EXPERIENCE OF MEDIA EDUCATION

Abstract

The article highlights the importance of developing media competence among students. The authors discuss theoretical and practical ways to promote media literacy education and develop media competence essential for students' comprehensive preparation to use mass media. As practice shows the digitalization of all areas of social life brings not only advantages as professional and personal growth opportunities but also other additional concerns. People struggle to analyze, evaluate and comprehend the information because there are so many resources, the information is disseminated through various channels with tremendous speed. There is a rising need to promote media competences among students who consumes large amounts of information. In this rapidly developing digital world information consumers need a new set of competences to search for information effectively, intake and analyze it. It is important to facilitate systematic knowledge transfer on media and promotion of media competence needed to analyze the subject of the information and its purpose.

Keywords: mass media, media education, media literacy, media competence.

Introduction. Media competences is crucial in today's information-driven society. Media competences foster critical thinking. Developing media competences helps individuals question, analyze, and evaluate media content, promoting a more discerning and skeptical approach to information consumption (Andrew M., Guess et al., 2020).

Recent education documents show attention to this issue. UNESCO considers policy in the field of student education as a constant process not only of enrichment of knowledge and skills, but also, to a large extent, as a process of creation or creation of a personality (Nodira Rustamova, 2021).

The meanings of media competence refer to:

- a) The ability to access mass media, to understand and evaluate contents and various other aspects of mass media critically;
- b) The capacity to create/produce in the field of communication;

- c) The ability to filter, select and use to own benefit the multitude of information sent by the mass media.

Media competence is a key concept in the field of media literacy and media education. However, its two components - media and competence - can be interpreted differently, which has an impact on the theoretical concepts of media competence. The term can be used both in the sense of a general human capacity and a goal for media education activities. Against this background, and in the context of the critique of media competence as a key concept, conceptual clarifications are made. They can serve as a basis for the creation of liable concepts for stimulating and developing media competence. Thus, competence standard models can play an important role as guidelines for media education activities (Tulodziecki, G., & S. Grafe., 2019).

Materials and methods. In today's digital landscape, misinformation and fake news are widespread. Developing media competences equips individuals with the skills to identify and navigate misinformation effectively. By understanding how information is produced, disseminated, and verified, individuals can protect themselves from falling victim to misinformation and make informed decisions based on credible sources (Nicole M. Lee, 2018).

Developing media competences is important because it promotes media literacy, critical thinking, and protects from misinformation. It equips individuals with the skills necessary to navigate the digital landscape and engage responsibly with media in an increasingly interconnected world (Kimberly A. Lawless & P. G. Schrader, 2018). The importance of developing media competences among university students was highlighted in the works of Smyrnova-Trybulska Eugenia (2019), Zhu, S. et al. (2020), Gutiérrez-Pequeño et al. (2023), Fedorov Alexander & Levitskaya Anastasia (2017), Kuatbekov, A. et al. (2023).

Digitalization affects all areas of our private and professional lives, posing new requirements to cope with new technologies and the possibilities they offer. New competences are needed for mastering these challenges. The problem is that learning settings often do not address media literacy as a main competence goal (Yvonne Sedelmaier et al., 2023). According to survey conducted in the United States of America and India (Andrew M. Guessa et al., 2020) the youth display a higher level of knowledge in terms of media languages and technology usage, however they are not as strong in skills linked to reception and audience and are lacking in skills in production and programming processes and dissemination, with a basic level in aspects related to ideology and values. The similar findings were obtained by López-Meneses et al. (2020) where the results showed that 1,073 students of one Italian and two Spanish universities had an upper intermediate level of competence in information

and digital literacy, and communication and collaboration, but a lower intermediate level in terms of digital content creation, particularly in the creation and dissemination of multimedia content using different tools.

The experimental work on the formation of media competences of students was carried out in the following stages: determining, forming and summing up. Pedagogical support of the process of formation of media creativity of students, the implementation of psychological and pedagogical conditions that improve the effectiveness of the process, diagnosis, monitoring and proving the effectiveness of practical experimental work on the criteria and indicators of the formation of media reporting of students in the groups where the experiment was staged.

Results and discussion. During the study, pedagogical practice lectures, seminars on interactive methods of interaction and dialogue interaction in the hours of sociology allowed students and teachers to work together to make decisions and to innovate the educational process in the formation of the media creativity among students. Thus, the experiment on the formation of the research was carried out in accordance with the initial plan and we were able to solve the tasks set.

At the end of the shaping experiment, diagnostic methods, which were carried out during the determining experiment on the formation of medical competence of students, were repeated. With the results of the first survey, it is clear that the control and experiment groups did not change their decision that the majority of students were the internet as the main media, followed by television. And now, in order to determine the knowledge of our students about media, media production, media literacy, we have repeated the questionnaire of Fetiskin by modifying (Sukhodolskij G. V., 1998) the methodology "Knowledge of information technologies" with the name "Do you know about the media world?" (Glass Dzh. & Stehnl Dzh., 1976).

Table 1. In the control and experiment groups, the relative percentage of the survey selected using the methodology “Do you know about the media world?” (According to N.P. Fetiskin’s methodology)

№	Recognition of information and communication technologies	Control group	Experimental group
1	high	48,2	49,8
2	medium	42	42
3	low	9	8,2

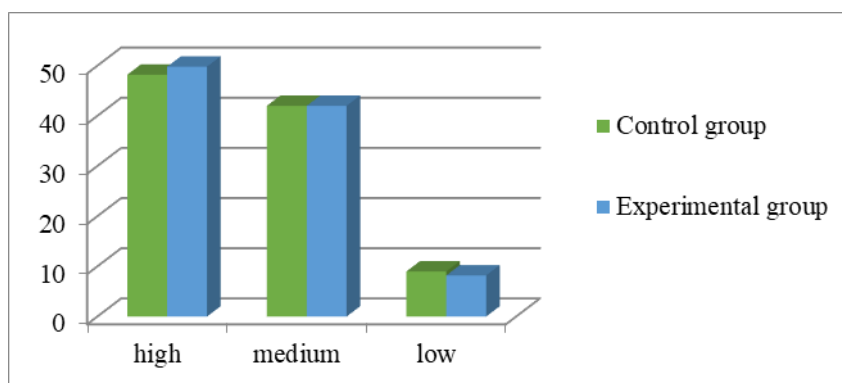


Figure 1: The relative percentage of survey selected by the methodology “Do you know about the media world?” in control and experiment groups (%) (According to N.P. Fetiskin’s methodology)

Table 2. The result of the survey before and after the experiment carried out in control and experiment groups with the “Do you know about the media world?” methodology (According to N.P. Fetiskin’s methodology)

№	Levels	Before the experiment (%)		After the experiment (%)	
		Control group	Experimental group	Control group	Experimental group
1	high	10,5	12,2	48,2	49,8
2	medium	42,3	44,5	42,	42
3	low	47,2	43,3	9	8,2

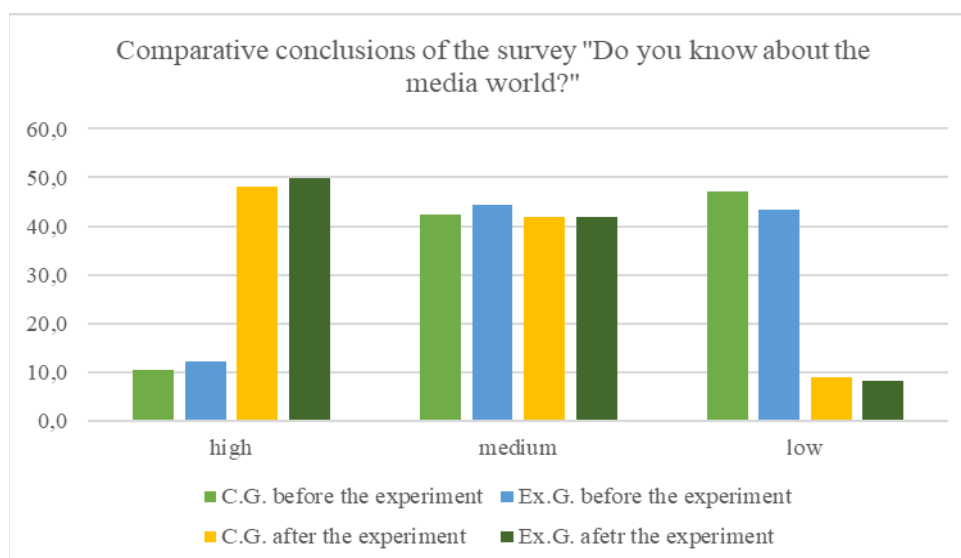


Figure 2: Comparative conclusions of the survey “Do you know about the media world?” in control and experiment groups (%) before and after the experiment (According to N.P. Fetiskin’s methodology)

Table 3. Comparative summary of the comparative results of Lukanova’s survey “How to diagnose the level of formation of the cyber terrorism prevention activities”

№	Criteria	Control group			Experimental group		
		Levels					
		high	medium	low	high	medium	low
1	Motivational	51,7	36	12,3	53,4	35	11,6
2	Cognitive	51,5	37	11,5	51,5	35	13,5
3	Evaluative	48,6	38	13,4	49,6	35	15,4

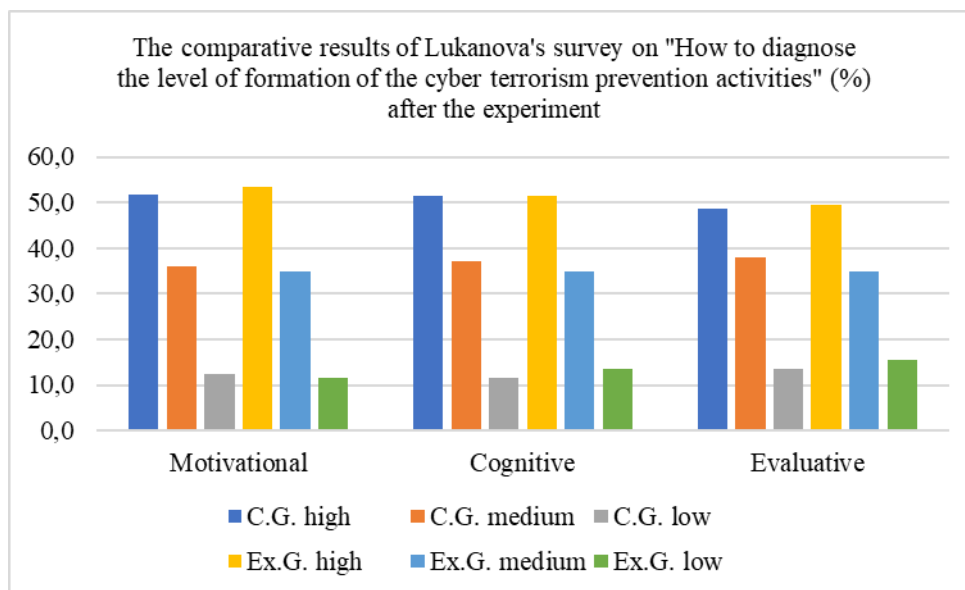


Figure 3: The comparative results of Lukanova’s survey on “How to diagnose the level of formation of the cyber terrorism prevention activities” (%) after the experiment

Table 4. The comparative results of Lukanova’s survey on “How to diagnose the level of formation of the cyber terrorism prevention activities”

Formation of incentives to combat cyber terrorism activities	Before experiment (%) - BE						After experiment (%) - AE					
	Control group			Experimental group			Control group			Experimental group		
	levels						levels					
	high	Medium	low	high	Medium	low	high	Medium	low	high	Medium	low
Motivational	12,5	39,1	48,4	13,6	39	47,4	51,7	36	12,3	53,4	36	10,6
Cognitive	10,2	39,2	50,6	11,2	39,3	49,5	51,5	37	11,5	51,5	37	11,5
Evaluative	9,5	38	52,5	10,5	36	53,5	48,6	38	13,4	49,6	38	12,4
Average	10,7	38,76	0,5	11,76	38,1	50,13	50,6	37	12,4	51,5	37	11,5

According to the methodology “How to diagnose the level of formation of incentives for combating cyber terrorism activities” modified by control and experimental groups, we used

“Student’s T-criterion for independent scans” in order to determine the difference between the levels of knowledge about media, media products, media reporting.

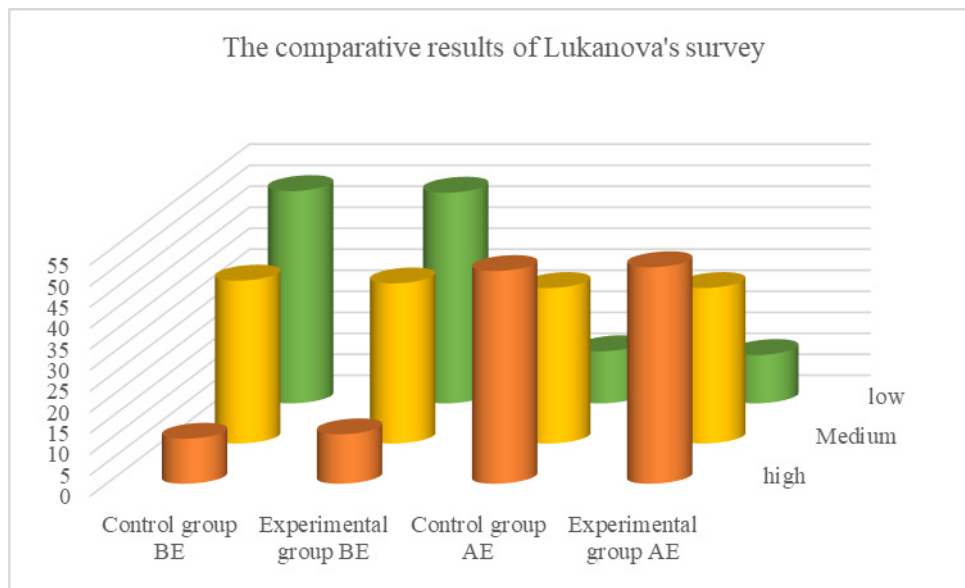


Figure 4: The comparative results of Lukanova’s survey on “How to diagnose the level of formation of the cyber terrorism prevention activities”

Table 5. *The comparative results of Lukanova’s survey on “How to diagnose the level of formation of the cyber terrorism prevention activities” have been experienced in the past (%) (according to “Student’s T-criterion for independent selects”)*

Formation of incentives to combat cyber terrorism activities	Before experiment (at %)						after experiment (at %)						C.G.	Ex.G.
	C.G.			Ex.G.			C.G.			Ex.G.			Temp.	Temp.
	levels			levels			levels			levels			P	p
	M ₁	m ₁	σ1	M ₁	m ₁	σ1	M ₂	m ₂	σ2	M2	m2	σ2		
M	1,8	0,34	2,1	1,84	0,9	2,73	1,1	1	0,1	1,9	0	1,9	0,440	p=0,05 0,275
T	0,5	0,44	0,1	0,56	1,2	0,63	0,9	0	0,9	0	0	0	0,318	p=0,05 1.604
B	1,2	0,76	2	1,26	2,1	3,37	2	1	1	1,9	0	1,9	0,110	p=0,05 0,452

Verification of the reliability of our research results was carried out using the criterion “Hi-square”. Here’s the formula for calculating the size:

$$x_n^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

To determine whether differences in actual and expected frequencies are reliable, you need

to compare the value of χ^2_{exp} with the critical value of this criterion.

You can only conclude about the reliability of the differences when the value of the value of χ^2_{exp} exceeds the critical value χ^2_{crit} .

In this case, the value was equal to the values of the $\chi^2_{exp} = 482.071$, and the $\chi^2_{krit} = 447.68$. This means that the experimental value exceeded the critical. Therefore, the level of

reality between control and experimental groups is shown in $p = 0,05$.

The final calculations show an increase in the results in the experimental group rather than the control group. The results of the shaping experiment demonstrate the effectiveness of the work aimed at the development of analytical and thoughtfulness in the consumption of media products, providing students with a set of theoretical and practical knowledge about “media”, “media education”, “media literacy”, “consciousness dancing”, “media corruption”.

If we look at the previous and recent results of the survey synthesis of the control and experiment groups, there is little progress in the responses of the students of the control group, and there is a slight improvement in the response results of the students of the experiment group.

The final results of the shaping experiment required the release of the growth dynamics of the components of media properties.

A graphic image of the data on the indicators of motivational, cognitive and appraisal components of the media content defined in our article is shown in the following graph.

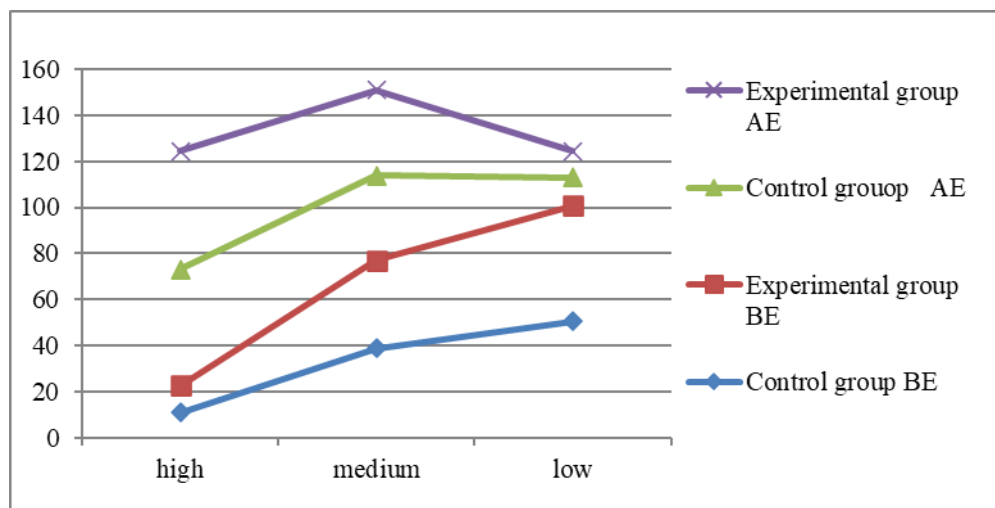


Figure 5: Student's Media Incentive before (BE) and after experiment (AE) (%)

The graph shows an increase in results in the practice group as compared to the control group. The results of the shaping experiment demonstrate the effectiveness of the work aimed at the development of analytical and thoughtfulness in the consumption of media products, providing students with a set of theoretical and practical knowledge about

“media”, “media education”, “media literacy”, “consciousness dancing”, “media corruption”.

To confirm the results, we compared the t-criterion Student size by comparing the averages using the following formula:

$$t = \frac{M_1 - M_2}{\sqrt{m_1^2 + m_2^2}}$$

Arithmetic mean of the first set of M_1 , M_2 - arithmetic mean of the second relative set, m_1 - error of the first arithmetic mean, m_2 - error of the second arithmetic mean.

$$t_{emp} = \frac{|\bar{x} - \bar{y}|}{\sqrt{n_1 * D_x + n_2 * D_y}} * \sqrt{\frac{n_1 * n_2}{n_1 + n_2} * (n_1 + n_2 - 2)}$$

As noted above, because the calculated criterion value is higher than the critical value, we see that the data observed in the experimental group was less than the t-empirical value. That is, compared to the control group, we make sure that the experimental group is not accurate.

For us, the main method of prevention of sanity on the basis of universities - the formation of media literacy on the issue of consciousness, not only the understanding of the need for knowledge, but also the self-improvement of the ability to resist it, it has also contributed widely

to the formation of skills, skills, knowledge, qualities and motivational goals in this direction.

The use of an action-oriented approach to the formation of media literacy of students, the focus of this approach on active, productive, self-and group work of students, the variability of the content of pedagogical work, the selection of active methods of teacher training, which are visible in the variety of work performed by students, reduced the synthesis of lessons and increased students' interest in the work carried out.

One of the objectives of the study was the development of media literacy, which allowed future professionals to accumulate theoretical and practical knowledge and skills related to the media. It has contributed to the formation of skills of applying knowledge in practice.

Special methods used during the author's course on the development of knowledge of the media and the competent use of medi-products have contributed to the development of their critical thinking. In turn, the students' ability to think from a critical point of view showed that they have developed the necessary competencies as mediators. The work carried out in this direction in the course of the experiment

showed the effectiveness of the technology of the process of formation of medical certificates of students.

Conclusion. It proves that the research tasks have been solved, that the psychological and pedagogical conditions proposed were correctly chosen. In the framework of the research tasks, the three main stages ("diagnostics - course - diagnostics") presented in the program of the experiment were proved to be the most logical correct decision. These periods made it possible to analyze the changes occurring in the indicators and criteria of media competence of the test subjects during all periods of the experiment, and the formative period of the experiment showed that there is an increase in the formation of all components of media competence which is similar to the results gained during study which was held in the Rostov State University of Economics, Russian Federation. Researchers Fedorov Alexander & Levitskaya Anastasia (2017) conclude, that the level of media competence of students who have a one-year training course in the framework of media literacy education courses four times higher than in similar indicators in the control group.

References

Andrew M. Guess, Michael Lerner, Benjamin Lyons, Jacob M. Montgomery, Brendan Nyhan, Jason Reifler, and Neelanjan Sircar. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the national academy of sciences* Vol. 117 | No. 27.

Fedorov Alexander, Levitskaya Anastasia (2017). Comparative analysis of the indicators' levels of students' media competence development in the control and experimental groups. *International Journal of Media and Information Literacy*. №1. URL: <https://cyberleninka.ru/article/n/comparative-analysis-of-the-indicators-levels-of-students-media-competence-development-in-the-control-and-experimental-groups>.

Gutiérrez-Pequeño, José Miguel, Rocío Anguita-Martínez, and Yasna P. Pradena-García. (2023). "Social Media Labs in the Social Education Degree: Exploring Digital Competences of University Students". *Education Sciences* 13, no. 1: 20. <https://doi.org/10.3390/educsci13010020>

Kimberly A. Lawless, P. G. Schrader (2018) *Where Do We Go Now? Understanding Research on Navigation in Complex Digital Environments*. *Handbook of Research on New Literacies*

Kreativ research. Retrieved from <http://www.mediapedagogy.eu/media-competence/> 01.11.2024.

Kuatbekov, A., Vershitskaya, E., Kosareva, I., & Ananishnev, V. (2023). RETRACTED: E-Learning as a basis for the development of media competences in students. *Journal of Information Science*, 49(4), 1111-1125. <https://doi.org/10.1177/01655515211040656>

López-Meneses, E., Sirignano, F. M., Vázquez-Cano, E., & Ramírez-Hurtado, J. M. (2020). University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities. *Australasian Journal of Educational Technology*, 36(3), 69–88. <https://doi.org/10.14742/ajet.5583>

Nicole M. Lee. (2018). Fake news, phishing, and fraud: a call for research on digital media literacy education beyond the classroom. *Communication Education*, 67:4, 460-466, DOI: 10.1080/03634523.2018.1503313

Nodira Rustamova (2021). Issues of development of students' media competence based on vitagenic (life) experience. *Journal of Physical Education and Sport ® (JPES)*, vol 21 Issue 6, Art 359. 2599-2616.

Smyrnova-Trybulska Eugenia. (2019). Evolution of media competences. "Open educational environment of modern university" special edition, 77-92. <https://rebus.us.edu.pl/handle/20.500.12128/11392>

Tulodziecki, G., and S. Grafe. (2019). "Media Competence." In *The International Encyclopedia of Media Literacy*. Hoboken, NJ: Wiley-Blackwell. 1–14. <https://doi.org/10.1002/9781118978238.ieml0113>.

Yvonne Sedelmaier, Ercole Ercolei, Dieter Landes Enhancing. (2023). Media Literacy in Higher Education. In book: *Learning in the Age of Digital and Green Transition*, 390-399. www.researchgate.net

Zhu, S., Hao Yang, H., Xu, S., & MacLeod, J. (2020). Understanding Social Media Competence in Higher Education: Development and Validation of an Instrument. *Journal of Educational Computing Research*, 57(8), 1935-1955. <https://doi.org/10.1177/0735633118820631>

Гласс Дж., Стэнли Дж. (1976). Статистические методы в педагогике и психологии. - М.: Изд-во «Прогресс» (с. 495). <http://www.mediapedagogy.eu/media-competence/>

Сидоренко Е. В. (2003). Методы математической обработки в психологии / СПб.: Речь, с. 84.

Суходольский Г. В. (1998). Основы математической статистики для психологов. СПб.: Издательство С. - Петербургского университета, с. 464.

References

Andrew M. Guess, Michael Lerner, Benjamin Lyons, Jacob M. Montgomery, Brendan Nyhan, Jason Reifler, and Neelanjan Sircar. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the national academy of sciences* Vol. 117 | No. 27.

Fedorov Alexander, Levitskaya Anastasia (2017). Comparative analysis of the indicators' levels of students' media competence development in the control and experimental groups. *International Journal of Media and Information Literacy*. №1. URL: <https://cyberleninka.ru/article/n/comparative-analysis-of-the-indicators-levels-of-students-media-competence-development-in-the-control-and-experimental-groups>.

Gutiérrez-Pequeño, José Miguel, Rocío Anguita-Martínez, and Yasna P. Pradena-García. (2023). "Social Media Labs in the Social Education Degree: Exploring Digital Competences of University Students". *Education Sciences* 13, no. 1: 20. <https://doi.org/10.3390/educsci13010020>

Kimberly A. Lawless, P. G. Schrader (2018) Where Do We Go Now? Understanding Research on Navigation in Complex Digital Environments. *Handbook of Research on New Literacies*

Kreativ research. Retrieved from <http://www.mediapedagogy.eu/media-competence/> 01.11.2024.

Kuatbekov, A., Vershitskaya, E., Kosareva, I., & Ananishnev, V. (2023). RETRACTED: E-Learning as a basis for the development of media competences in students. *Journal of Information Science*, 49(4), 1111-1125. <https://doi.org/10.1177/01655515211040656>

López-Meneses, E., Sirignano, F. M., Vázquez-Cano, E., & Ramírez-Hurtado, J. M. (2020). University students' digital competence in three areas of the DigCom 2.1 model: A comparative study at three European universities. *Australasian Journal of Educational Technology*, 36(3), 69–88. <https://doi.org/10.14742/ajet.5583>

Nicole M. Lee. (2018). Fake news, phishing, and fraud: a call for research on digital media literacy education beyond the classroom. *Communication Education*, 67:4, 460-466, DOI: 10.1080/03634523.2018.1503313

Nodira Rustamova (2021). Issues of development of students' media competence based on vitagenic (life) experience. *Journal of Physical Education and Sport ® (JPES)*, vol 21 Issue 6, Art 359. 2599-2616.

Smyrnova-Trybulska Eugenia. (2019). Evolution of media competences. "Open educational environment of modern university" special edition, 77-92. <https://rebus.us.edu.pl/handle/20.500.12128/11392>

Tulodziecki, G., and S. Grafe. (2019). "Media Competence." In *The International Encyclopedia of Media Literacy*. Hoboken, NJ: Wiley-Blackwell. 1–14. <https://doi.org/10.1002/9781118978238.ieml0113>.

Yvonne Sedelmaier, Ercole Ercolei, Dieter Landes Enhancing. (2023). Media Literacy in Higher Education. In book: *Learning in the Age of Digital and Green Transition*, 390-399. www.researchgate.net

Zhu, S., Hao Yang, H., Xu, S., & MacLeod, J. (2020). Understanding Social Media Competence in Higher Education: Development and Validation of an Instrument. *Journal of Educational Computing Research*, 57(8), 1935-1955. <https://doi.org/10.1177/0735633118820631>

Glass, Dzh., & Stanley, Dzh. (1976). *Statisticheskiye metody v pedagogike i psikhologii* [Statistical methods in pedagogy and psychology]. Moscow: Progress. [in Russian]

Sidorenko, E. V. (2003). *Metody matematicheskoy obrabotki v psikhologii* [Methods of mathematical processing in psychology]. Saint Petersburg: Rech. [in Russian]

Sukhodolskiy, G. V. (1998). *Osnovy matematicheskoy statistiki dlya psikhologov* [Fundamentals of mathematical statistics for psychologists]. Saint Petersburg: Izdatel'stvo S.-Peterburgskogo universiteta. [in Russian]

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FUNDAMENTALS OF QUALITY ASSURANCE IN THE HIGHER EDUCATION SYSTEM

Abstract

This study explores the critical issue of quality assurance in higher education systems, both in Kazakhstan and globally, where universities operate in a «consumer market» with students selecting educational programs, institutions, and resources. Based on an analysis of international and domestic research, the study aims to identify the foundations of quality assurance in higher education. The authors highlight key aspects of higher education quality, including student quality, teaching characteristics, academic regulations, and administrative support. Educational quality is examined within the context of international standards as a matter of national importance, with education levels serving as a foundation for economic development of both state and society. The research analysis reveals that various approaches, methods, and criteria for quality management are employed in creating systems for ensuring and assessing the quality of higher education institutions in Kazakhstan and abroad. These include the evaluative method of university activity quality management (SWOT analysis), Total Quality Management (TQM) strategy, and an approach based on the requirements of international quality standards ISO 9000:2000. The study notes that Kazakhstan has adopted a management model based on the ISO 9000:2000 international quality standards. This comprehensive review contributes to the understanding of quality assurance mechanisms in higher education and their implications for educational policy and practice.

Keywords: quality assurance, higher education, Kazakhstan, international standards, quality management.

Introduction. Ensuring the quality of the education system is a crucial issue not only in Kazakhstan but also worldwide, where universities operate in a «consumer market» and students have the freedom to select educational programs, institutes, libraries, resources, and acquire knowledge (Chapman & Adams, 2002; Doherty, 2008). The study aims to determine the fundamentals of supporting quality in the higher education system by analyzing foreign and domestic research conducted by various scholars (Arcaro, 1995; Barrett et al., 2006; Belohlav et al., 2004; Calvo-Mora et al., 2006; Crawford & Shutler, 1999; Fernández Cruz et al., 2016; Frederiks et al., 1994; Hopkins, 2015;

Ingason, 2015; Kusainov, 2013; Laevers, 1994; Navaratnam, 1997; Permyakov, 2007; Puyt et al., 2020; Taskov & Mitreva, 2015; Vlašić et al., 2009; Yelezhanova et al., 2020; Zaharias & Pappas, 2016).

The authors emphasize various aspects that contribute to the quality of higher education, including the quality of students, teaching characteristics, academic regulations, and administrative support.

The quality of education is addressed in accordance with international standards as a task of national significance, recognizing that the level of education serves as the foundation for the economic development of the state and society.