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ENHANCING KEY COMPETENCIES FOR THE EMPOWERMENT OF MEDIA LITERACY

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Abstract: Continuous development of knowledge, skills, and abilities that lead to the enhancement of media literacy results in an adequate perception of media discourse, the development of critical thinking, and significantly greater safety, especially in the virtual environment. This represents an indispensable resource that provides both individuals and society as a whole with the necessary knowledge and skills to identify, understand, and evaluate media content, thereby creating a platform for the participatory exercise of one of the fundamental human rights. In the contemporary era, educational institutions, from primary education to doctoral studies, should be recognized for their educational and practically applicable role in designing, creating, implementing, and evaluating media literacy educational programs. Such an approach, in subsequent iterations, implies their broader contextual and programmatic transformation to become more sensitive and flexible in response to the rapid changes in the media industry. Within this context, a primary study was conducted to examine how and to what extent students have developed key competencies during their higher education, how these competencies contribute to the development of media literacy, and how they can be improved and integrated into curricula. The research sample was purposively selected and consisted of students from two private universities in the Republic of Serbia (n=185). Data were collected from December 2025 to February 2026. The study established the importance of media literacy and critical thinking for accessing, analyzing, and evaluating media content in various contexts. It was demonstrated that media literacy is closely linked to the development of critical thinking, digital literacy, and ethical responsibility, and that the lack of development of key competencies can lead to uncritical acceptance of disseminated information and manipulation of public opinion.

Keywords: *media literacy, education, key competencies, critical thinking, manipulation*
Field: Social Sciences

1. INTRODUCTION

The media have long surpassed the threshold at which they primarily served as tools for information and entertainment. In the new millennium, traditional and especially digital media exert a powerful influence on shaping attitudes, values, behaviors, and identities, with young people being particularly sensitive to these effects. In such a dynamic and ever-changing media environment, among the most important competencies required for active social, critical, and responsible participation, manifested through the ability to access media discourse, analyze and evaluate it, and form independent opinions in various contexts, is media literacy. Media literacy positively correlates with the development of critical thinking, digital literacy, and communication skills, while the establishment of ethical responsibility is indispensable. The absence or abstraction of these competencies can lead to the uncritical acceptance of information, dissemination of misinformation, and manipulation of targeted audiences.

Media literacy should be oriented toward addressing the key challenges of contemporary society, including phenomena that affect personal autonomy and decision-making capacity, thereby fostering the development of critical awareness of new media-mediated realities. In this context, it is essential to move beyond approaches based solely on technical mastery of devices to prevent uncritical adoption and consumption of media content (Mesquita-Romero et al., 2022). A prerequisite for redefining the knowledge and skills students can acquire during formal education is the enhancement of teachers' awareness and a deeper understanding of contemporary media literacy competencies, as an integral part of the educational and pedagogical role of universities in promoting a safe, responsible, and inclusive relationship between students and the media (Lähdesmäki & Maunula, 2023).

Valuing the relevance of media literacy in contemporary society, it is essential to systematically investigate which key competencies contribute to its development and how they can be enhanced through educational processes. The research encompassed an analysis of the following key competencies, selected in accordance with the research objectives and theoretical framework: Capacity for original thinking and innovative approaches, Analytical and evaluative reasoning skills, Problem-oriented reasoning and solution development, Competence in informed and responsible decision-making, Adaptability to changing conditions and contexts, Collaborative work competence in group settings, Interpersonal communication

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effectiveness, Proficiency in spoken and written foreign-language communication, Fundamental digital and ICT literacy, Information handling and analytical processing skills, Methodological competence in research and inquiry, Adherence to ethical principles and professional integrity, Practical implementation of theoretical knowledge, Capacity for responsible leadership and coordination, Sensitivity to cultural diversity and inclusiveness, Proactive behavior and autonomous task management, Learning capacity and continuous development orientation, Planning and organizational competence, Reflective and self-evaluative capability, and Intrinsic motivation and work engagement.

2. LITERATURE REVIEW

Media competencies encompass not only practical skills but also various forms of literacy, including knowledge, the capacity to critically analyze media content, as well as the ability to employ media effectively for innovative and creative communication. (Tolić, 2009). Media education should include more than just learning how to use digital tools. It should also help students understand the context, purpose, and social effects of media. This way, students become thoughtful and responsible, able to create meaningful content and take part in democratic discussions (Buckingham, 2003).

Fake news, hidden advertising, hate speech, cyberbullying, and gender and racial stereotypes are some of the problems people and society face in the digital media age. Because of this, media literacy becomes an important skill that helps people understand the media world better and take part more actively in today's democratic society (Vučetić, 2020, pp. 6–7). The factors that substantially impact the development of particular competencies are dynamic and subject to variation, yet they typically reflect spatial and temporal constraints. Penjišević et al. (2025) demonstrated that individuals with higher levels of media literacy are better equipped for labor market entry, while also highlighting the family's significant positive influence on the development of 21st-century skills.

Pungente (1989) explains the key concepts and reasons for media education as follows: all media are deliberately created constructs, not just reflections of reality; they shape reality by influencing attitudes, behaviors, and ideas; media operate as a profit-driven industry where the audience is treated as a commodity; users actively interpret media content rather than passively receiving it; media have social and political impacts; and different media outlets report the same event in different ways.

Sančanin et al. (2024) emphasize that in a participatory environment characterized by a preference for speed and cost-efficiency over accuracy, the function of the media is increasingly shifting toward an educational role. In this context, educational institutions bear the responsibility of providing students with competencies that are relevant, broadly transferable, and competitive within the labor market. The authors highlight information management capabilities, particularly the skills related to collecting, processing, and analyzing data from diverse sources, as the most essential competency. Furthermore, the study indicates that students who developed their soft skills and media literacy throughout their academic progression exhibited a higher level of proficiency in critically assessing media content and effectively distinguishing reliable information from misleading or false material.

Emphasizing media literacy in relation to artificial intelligence (AI) constitutes a crucial civic competency, because preparing students to recognize and critically resist manipulative information strengthens the quality of education, supports lifelong learning, and protects democratic processes in environments mediated by algorithms. In this context, Ponce Rojo et al. (2025) regard media and information literacy as a principal means of promoting the ethical and responsible use of digital tools within educational settings. Their objective is to reduce students' vulnerability to harm by teaching them to distinguish reliable information from biased or false content.

In her 2025 study, Khudoyarova Dilnoza identifies significant gaps in current understanding regarding the ways educational institutions incorporate elements of spiritual education alongside contemporary pedagogical methods and technological advancements. The research examines the interactions among schools, families, and community organizations in promoting spiritual resilience and moral consciousness among youth as a response to modern challenges. The curricular innovations proposed in the study seek to enhance young people's competencies in identifying and resisting harmful ideological influences, as well as in combating disinformation, by integrating media literacy with national ideological and value-based content.

Several authors highlight that the current economic landscape, coupled with the shift toward the fifth and sixth developmental paradigms, will exceed the capacities of traditional educational models, thereby requiring significant transformations in educational approaches, methodologies, and goals. These transformations involve a departure from predominantly extensive teaching and learning practices toward strategies that emphasize the intensive cultivation of skills and professional competencies, with particular

focus on media literacy and media education (Lebid & Shevchenko, 2020).

3. DATA, METHODOLOGICAL APPROACH, AND KEY OBSERVATIONS

The primary survey was developed to investigate the manner and degree to which students perceive the development of key competencies throughout their studies, and how this development impacts critical thinking, with a particular emphasis on the dissemination of information through the media. In relation to this, the following research questions were posed:

Q1. Which key competencies, such as critical thinking, digital competencies, communication, and ethical skills, play the most significant role in enhancing media literacy?

Q2. What are the challenges and limitations in implementing educational strategies aimed at developing media literacy?

Data were collected through the use of Google Forms as the primary research instrument. The research sample was selected using a purposive sampling approach and included students enrolled at two private universities located in the Republic of Serbia. To ensure the content validity of the questionnaire, a pilot study was initially carried out with 25 respondents. Following this, the finalized survey was administered to a separate sample of 185 participants (n=185). Data collection occurred between December 2025 and February 2026.

The questionnaire was structured into two distinct sections. The initial section comprised general demographic and background questions, while the subsequent section required respondents to evaluate the development of key 21st-century competencies using a seven-point Likert scale, ranging from 1 (indicating insufficient development) to 7 (indicating highly developed competence). To address the research questions, descriptive statistics, measures of dispersion, and measures of skewness were calculated. Nonparametric techniques were employed for hypothesis testing. Data processing and analysis were carried out with the use of SPSS.

4. ANALYSIS OF EMPIRICAL FINDINGS AND DISCUSSION

In the study, 185 participants took part, of whom 48.1% were male and 51.9% female. The largest proportion of respondents, 38.6%, reported an academic performance classified as above average. For further details, see Table 1.

Table 1: Statistics

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	89	48.1	48.1	48.1
	Female	96	51.9	51.9	100.0
	Total	185	100.0	100.0	
Your average grade during your university studies	Excellent	28	15.1	21.2	21.2
	Above average	51	27.6	38.6	59.8
	Average	40	21.6	30.3	90.2
	Below average	13	7.0	9.8	100.0
	Total	132	71.4	100.0	
Missing	System	53	28.6		
Total		185	100.0		

Source: Calculated by the authors.

Respondents identified that the top-ranked eight competencies predominantly belong to the Cognitive and Metacognitive domain. Namely, Ability to solve problems, Ability to apply knowledge in practice, Ability to learn, Ability to organize and plan, and Initiative and self-management, as well as the Digital-Information domain, which includes Basic computer skills and the Ability to manage information through gathering and analyzing data from various sources. The only exception to this pattern is the competency Flexibility and adaptability, defined as the ability to adjust to new situations. All competencies exhibit relatively low variability (CV are below 27%).

According to the respondents, the most well-developed competency during their studies is Basic computer skills, which received an average score of 5.58, a median of 6, and a mode of 7. The

competency Ability to manage information, encompassing the gathering and analysis of information from various sources, was rated with an average score of 5.25, while both its median and mode were 6. These two competencies belong to the Digital-Information domain. It can be stated that the Digital-Information domain encompasses knowledge, skills, and attitudes that enable an individual to use digital technologies efficiently, critically, and responsibly. In today's society, characterized by constant information availability and the primary role of digital media, the development of competencies within the Digital-Information domain represents one of the key prerequisites for fostering media literacy and active participation of individuals in educational, professional, and social processes. The competency related to information management, encompassing the collection and analysis of information from multiple sources, which involves identifying significant sources, collecting, selecting, and processing information from various media and digital platforms, holds a central role within this group. It enables distinguishing reliable information from misinformation, manipulative content, and media bias. Importantly, competencies within the Digital-Information domain also include raising awareness of the ethical, legal, and security aspects of using digital media, such as privacy protection, responsible information sharing, and respect for copyright. In this way, competencies from this group contribute to the development of a responsible and critically oriented user of media content.

The second group of competencies, the Cognitive and Metacognitive domain, encompasses a set of competencies related to the mental processes required for acquiring, understanding, applying, and evaluating knowledge, as well as an individual's ability to regulate their thinking. This group of competencies forms the foundation for the development of critical thinking in contemporary society.

The competence that the respondents developed the most during their studies is the ability to solve problems, which received an average score of 5.46, with both the modal and median scores being 6. This variable exhibits strong negative skewness (Skewness = -1.101). The competency Ability to solve problems involves identifying problems, analyzing available information, selecting appropriate strategies, and evaluating the outcomes of decisions made. It is closely linked to the ability to apply knowledge in practice, as it requires the transfer of theoretical knowledge to concrete situations and real-world contexts.

The respondents rated the development of the competency Ability to apply knowledge in practice with an average score of 5.45, a mode and median of 6, and a skewness value of -1.059, indicating a pronounced negative skew in the distribution. For further details, see Table 2.

Table 2: Descriptive Statistics

	N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Std. Deviation Statistic	Variance Statistic	Skewness Statistic	Skewness Std. Error
Basic computer skills	179	1	7	5.58	1.689	2.852	-1.033	0.182
Ability to solve problems	185	1	7	5.46	1.281	1.641	-1.101	0.179
Ability to apply knowledge in practice	183	1	7	5.45	1.496	2.238	-1.059	0.180
Ability to learn	184	1	7	5.39	1.390	1.933	-1.172	0.179
Capacity for flexibility and adaptation to new situations	178	1	7	5.38	1.434	2.057	-0.928	0.182
Ability to organize and plan	180	1	7	5.32	1.505	2.264	-0.892	0.181
Initiative and self-management	183	1	7	5.31	1.440	2.073	-0.974	0.180
Proficiency in sourcing and interpreting information from different channels	180	1	7	5.26	1.518	2.303	-0.810	0.181
Appreciation of diversity and multiculturalism	183	1	7	5.21	1.914	3.663	-0.836	0.180
Ability to criticize and self-criticize	180	1	7	5.18	1.577	2.486	-0.757	0.181
Cooperation - the ability to work in a team	181	1	7	5.15	1.934	3.739	-0.918	0.181
Ability to make decisions	180	1	7	5.13	1.451	2.105	-0.679	0.181
Critical thinking	185	2	7	5.13	1.300	1.690	-0.649	0.179
Research and inquiry - research skills	183	1	7	5.08	1.542	2.379	-0.665	0.180
The ability to effectively communicate both orally and in writing in a foreign language.	181	1	7	5.05	1.787	3.192	-0.761	0.181
Communicativeness	181	1	7	4.99	1.817	3.300	-0.624	0.181
Self-motivation to work	182	1	7	4.94	1.848	3.416	-0.733	0.180
Creativity/innovation	185	1	7	4.91	1.409	1.986	-0.554	0.179
Leadership ability - leadership and responsibility	183	1	7	4.85	1.634	2.669	-0.546	0.180
Ethical commitment and orientation	181	1	7	4.80	1.545	2.386	-0.714	0.181

Source: Calculated by the authors.

The Kruskal–Wallis test revealed a statistically significant difference in the assessment of the development of the following competencies: Fundamental computer literacy, Problem-solving skills, Ability to implement knowledge practically, and Skills in organizing and planning, in relation to students'

grade point averages during their studies. For all these variables, students with an Excellent overall GPA had the highest mean ranks.

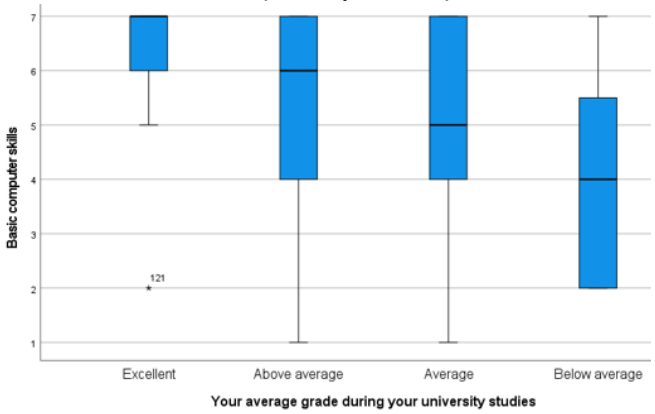
Table 3. Test Statistics[a,b]

	Basic computer skills	Ability to solve problems	Ability to apply knowledge in practice	Ability to learn	Ability to organize and plan	Capacity to systematically collect, critically evaluate, and synthesize information from diverse sources
Kruskal-Wallis H	14.841	11.219	9.746	4.774	8.760	2.939
df	3	3	3	3	3	3
Asymp. Sig.	.002	.011	.021	.189	.033	.401

a. Kruskal Wallis Test
b. Grouping Variable: Your average grade during your university studies

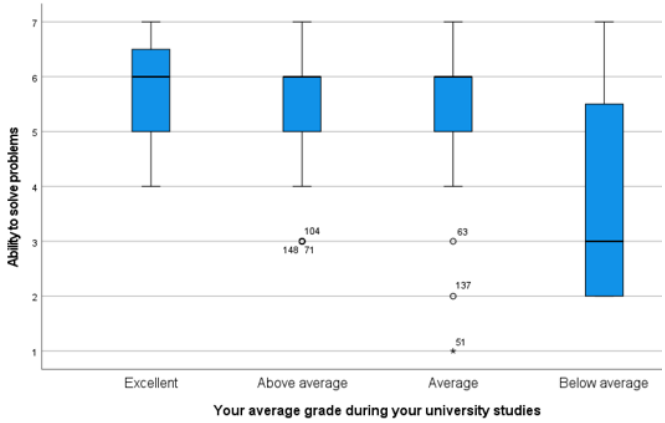
Source: Calculated by the authors.

Graph 1: Assessment of the Competency Development Level: Basic Computer Skills



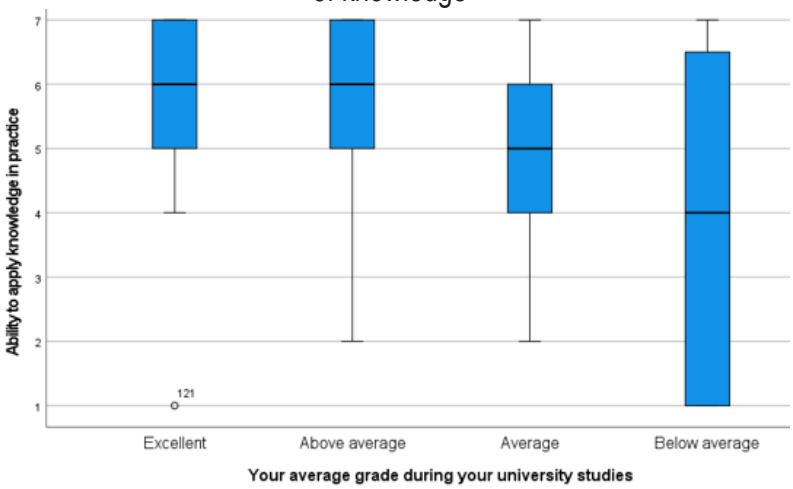
Source: Calculated by the authors.

Graph 2: Assessment of the Competency Development: Problem-Solving Ability



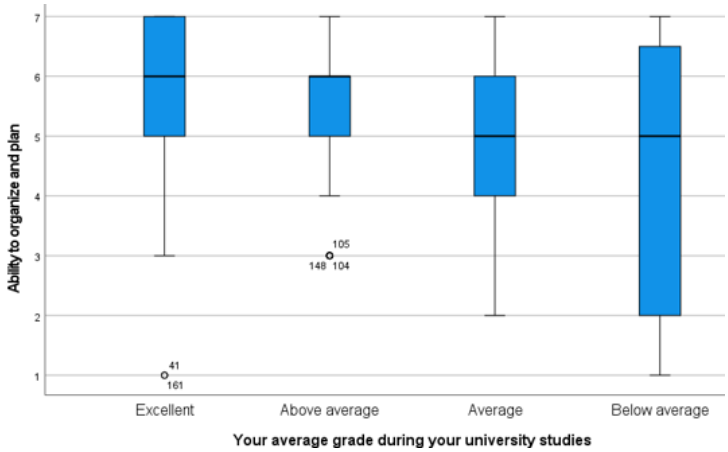
Source: Calculated by the authors.

Graph 3: Assessment of the Competency Development Level: Competence in practical application of knowledge



Source: Calculated by the authors.

Graph 4: Assessment of the level of competence development and the ability to organize and plan



Source: Calculated by the authors.

The capacity to systematically collect, critically evaluate, and synthesize information from diverse sources is essential for developing a comprehensive understanding and making informed decisions. This competence is complemented by the ability to identify, analyze, and effectively resolve complex challenges through strategic problem-solving methodologies. Furthermore, proficiency in translating theoretical knowledge into practical applications demonstrates an individual's capability to implement learned concepts within real-world contexts. Underpinning these skills is an aptitude for continuous intellectual growth, characterized by the effective acquisition, assimilation, and application of new knowledge and skills, which ensures ongoing adaptability and development in dynamic environments. There are significant direct linear relationships, as evidenced by correlation coefficients falling within the interval $0.5 < r < 0.7$. Additional information can be found in Table 3 below.

Table 3: Correlations

	1	2	3	4	5	6	7
Fundamental computer skills	-						
The ability to systematically gather and critically analyze information from diverse sources	.640**	-					
Capacity to identify, analyze, and resolve issues effectively	.515**	.468**	-				
Competence in implementing acquired knowledge within real-world contexts	.539**	.546**	.602**	-			
Capacity for continuous acquisition and assimilation of new knowledge	.453**	.369**	.550**	.651**	-		
Ability to organize and plan	.351**	.403**	.463**	.465**	.601**	-	
Initiative and self-management	.455**	.443**	.411**	.560**	.499**	.446**	-

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Calculated by the authors.

5. CONCLUSION

The results of the study suggest that competencies such as basic computer literacy, information management (including the collection and analysis of data from diverse sources), problem-solving skills, the practical application of knowledge, learning ability, organizational and planning skills, as well as initiative and self-management, are most effectively cultivated during university education. This confirms the crucial role of higher education institutions in the systematic formation of students' knowledge, skills, and capacities. The teaching and learning process is decisive for the development of cognitive, metacognitive, and digital-information competencies, which respondents identified as the most significant. The quality of higher education can be assessed through the extent to which institutions provide instructional methods oriented toward active learning, practical application of knowledge, the development of problem-solving abilities, and the fostering of student autonomy and initiative. The consistency in respondents' assessments of competency development further suggests that these competencies emerge from a coherent and structured educational framework rather than from individual or incidental factors. The results of the Kruskal–Wallis test indicate that students' average academic achievement during university studies represents a statistically significant differentiating factor for certain competencies. Overall, the findings confirm that the examined skills can be conceptualized as an interconnected set of general competencies, whose integrated development contributes to more effective academic and professional functioning. The digital-information competency cluster is particularly important in the contemporary media environment, as it provides the foundation for effective performance under conditions of media digitalization, accelerated content production, and continuous information flow. In turn, the cognitive and metacognitive competency clusters constitute the basis for the development of autonomous, critically oriented, and reflective individuals, which is essential for the advancement of media literacy and lifelong learning.

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