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IMPROVING THE METHODOLOGY FOR FORMING MEDIA COMPETENCE IN STUDENTS THROUGH DIGITAL TECHNOLOGIES: SCIENTIFIC AND PRACTICAL RESEARCH CARRIED OUT IN OUR COUNTRY AND WORLDWIDE

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Abstract. This article is devoted to the analysis of scientific and practical research conducted in our country and around the world on improving the methodology for forming media competence in students through digital technologies. The main goal of the study is to scientifically and theoretically substantiate the level of study of the subject. The article reveals that the expansion of the digital information environment creates an imbalance in students between the skills of independent search for information, critical analysis of its reliability, and its responsible application. Also, international and domestic approaches (DigComp 2.2, DigCompEdu, Falloon model, UNESCO recommendations, as well as scientific research of scientists of our country) are comparatively analyzed, and the importance of creating interactive didactic task designs in addition to technological tools is substantiated.

Keywords: media competence, digital literacy, DigCompEdu, Falloon model, pedagogical diagnostics, digital learning environment, project method.

TALABALARDA MEDIAKOMPETENTLIKNI RAQAMLI TEXNOLOGIYALAR VOSITASIDA SHAKLLANTIRISH METODIKASINI TAKOMILLASHTIRISH YUZASIDAN YURTIMIZDA VA DUNYO MIQIYOSIDA OLIB BORILGAN ILMIY VA AMALIY IZLANISHLAR

Annotatsiya. Mazkur maqola talabalarda mediakompetentlikni raqamli texnologiyalar vositasida shakllantirish metodikasini takomillashtirish yuzasidan yurtimizda va dunyo miqyosida olib borilgan ilmiy hamda amaliy izlanishlar tahliliga bag‘ishlangan. Tadqiqotning asosiy maqsadi mavzuning o‘rganilganlik darajasini ilmiy-nazariy jihatdan asoslashdan iboratdir. Maqolada raqamli axborot muhitining kengayishi talabalarda ma’lumotlarni mustaqil izlash, ularning ishonchliligini tanqidiy tahlil qilish va mas’uliyatli qo‘llash ko‘nikmalari o‘rtasida nomutanosiblikni keltirib chiqarayotgani ochib berilgan. Shuningdek, xalqaro va mahalliy yondashuvlar (DigComp 2.2, DigCompEdu, Falloon modeli, UNESCO tavsiyalari hamda yurtimiz olimlarining ilmiy izlanishlari) qiyosiy tahlil qilinib, texnologik vositalardan tashqari interfaol didaktik topshiriqlar dizaynini yaratish muhimligi asoslangan.

Kalit so‘zlar: mediakompetentlik, raqamli savodxonlik, DigCompEdu, Falloon modeli, pedagogik diagnostika, raqamli ta’lim muhiti, loyiha usuli.

НАУЧНЫЕ И ПРАКТИЧЕСКИЕ ИССЛЕДОВАНИЯ, ПРОВОДИМЫЕ В СТРАНЕ И В МИРЕ ПО СОВЕРШЕНСТВОВАНИЮ МЕТОДИКИ ФОРМИРОВАНИЯ МЕДИАКОМПЕТЕНТНОСТИ У СТУДЕНТОВ С ПОМОЩЬЮ ЦИФРОВЫХ ТЕХНОЛОГИЙ

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Аннотация. Данная статья посвящена анализу научных и практических исследований, проводимых в нашей стране и в мире по совершенствованию методики формирования медиакомпетентности у студентов с помощью цифровых технологий. Основная цель исследования — научно-теоретическое обоснование уровня изученности предмета. В статье показано, что расширение цифровой информационной среды создает дисбаланс между навыками студентов по самостоятельному поиску информации, критическому анализу ее достоверности и ответственному ее использованию. В статье также проводится сравнительный анализ международных и отечественных подходов (DigComp 2.2, DigCompEdu, модель Фаллона, рекомендации ЮНЕСКО, научные исследования отечественных ученых) и обосновывается важность создания интерактивных дидактических заданий, выходящих за рамки технологических инструментов.

Ключевые слова: медиакомпетентность, цифровая грамотность, DigCompEdu, модель Фаллона, педагогическая диагностика, цифровая образовательная среда, метод проектов.

INTRODUCTION: In today's modern information society, the sharp increase in the volume of digital information flow turns improving the methodology for the targeted formation of media competence in students into an urgent task. In the strategic documents of the Republic of Uzbekistan, digitalizing the educational process and systematically linking students' digital skills with higher education quality and competitiveness factors are specified as priority directions. In the Concept for the Development of the Higher Education System of the Republic of Uzbekistan until 2030, approved by Decree No. UP-5847 of October 8, 2019, tasks such as introducing digital technologies into the educational process, personalizing education, and utilizing distance services, webinars, blended learning, the 'flipped classroom', and cloud technologies are defined.

Object of research — the process of media education and digital teaching in the higher education system.

Subject of research — the methodology for the step-by-step formation of media competence in students through digital technologies and didactic models.

In scientific research and modern pedagogical concepts, the concept of media competence is covered much broader than the mere skill of using technical means (digital literacy). M. Spante and co-authors (2018), systematically analyzing the use of the concepts of digital literacy and digital competence in higher education, emphasize that media competence consists of the integration of critical analysis, ethical responsibility, and active media development in a complex information environment.

In scientifically substantiating the mechanisms of digital competence development, the 'Teacher Digital Competence Framework' proposed by G. Falloon (2020) serves as an important theoretical foundation. According to Falloon's approach, to transition from technical and operational skills to genuine digital competence, the pedagogical and technological environment must rely on three main pillars:

- **Technical-operational pillar:** technical free access to tools;
- **Pedagogical-methodological pillar:** assimilating information through problem-based learning and the project method;
- **Ethical and socio-cultural pillar:** information security, copyright, and responsible media activity.

At the international level, the European Commission's DigComp 2.2 (R. Vuorikari et al., 2022) and DigCompEdu for teachers (C. Redecker, 2017) framework models hold a leading

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place in criterion-referencing digital competence. The DigCompEdu model does not limit digital competence to information searching alone, but integrally connects it with pedagogical planning, critical verification (assessing source reliability), anti-fake skills, and learners' reflective activities.

Furthermore, recommendations provided by UNESCO (2023) and the 'Guidance for Generative AI in Education and Research' show that if technologies are not fully subordinated to educational goals and pedagogical design is not properly established, digital tools themselves will not automatically increase educational quality. This confirms that when forming media competence, primary attention should be focused not on the technological tool, but on the design of interactive and developmental didactic tasks.

Summarizing these international and national theoretical studies, the main objective of the research is to compare local and international experience as well as scientific-theoretical concepts, and to identify the level of study and problem statement regarding the methodology for forming media competence in students through digital technologies.

During the research process in Uzbekistan, S. Jumaeva[1] conducted a survey-based study titled 'Empirical Study of Media Consumption and Media Literacy among Youth of Uzbekistan' involving a total of 7,827 respondents, of whom 7,525 (96.1%) were students. The survey consisted of 28 questions covering media consumption and media literacy directions. 82.7% of participants belonged to the 18–25 age group. The following important results were obtained from the conducted research:

- • Indicated social networks and messengers as the primary source of information — 43%
- • Indicated internet websites as the primary source of information — 36.6%
- • Did not doubt the authenticity of the proposed fake photo — 66.3%
- • Stated they could prove the inaccuracy of a photo using web tools — 11%
- • Stated they have never tried to determine the original source of a video — 74.8%

An important aspect of S. Jumaeva's research for us is that it serves to substantiate that active use of digital information is not the same as the competence to critically verify it. In particular, it demonstrates the necessity of methodological tasks aimed at verifying visual information and determining the initial source. This pedagogical methodology is a survey-based diagnostic study. In addition, taking into account that the territorial composition of respondents was organized solely among participants from the Namangan region, generalizing the results equally to all students of Uzbekistan requires caution.

A. Dadakhonov[2] in his research work titled 'Sustainability of Media and Information Literacy Projects', utilized research methods such as in-depth interviews with media trainers and media and information literacy experts, analysis of scientific literature, and relevant documents. As the main results of the research conducted, the importance of local partnership, adapting training to local conditions, resource provision, technology integration, and political-institutional support for the sustainability of media and information literacy projects was identified.

[1] Djumanova, S. (2022). Media Consumption and Media Literacy Level of Uzbek Youth. Media Education (Mediaobrazovanie), 18(2), 157–168. DOI: 10.13187/me.2022.2.157.

[2] Dadakhonov, A. O. (2024). Sustaining foreign aid initiatives in the field of media and information literacy within the central asian context. Media Education, 15(1), 57–70. DOI: 10.36253/me-15703.

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When studying M. Jaakkola's [3] research titled 'Media and Information Literacy Models in Academic Discourse in Uzbekistan', detailed information was obtained regarding the systematic literature review and thematic analysis of academic publications dedicated to media and information literacy in Uzbekistan from 2011 to 2025. Furthermore, the following approaches were identified:

1. Value-based model.
2. Synthetic-thematic model.
3. User-centered model.
4. Disinformation-targeted model.

In the process of studying this research, we found it particularly useful in highlighting that in our study, foreign media competence models should not simply be copied into Uzbekistan's education system, but adapted to national educational conditions and the local information environment. However, it should be noted that this study analyzes existing concepts in the literature; it does not experimentally determine which of the models produces greater efficiency in students.

UNESCO's 2011 'Media and Information Literacy Curriculum for Teachers' program was developed for integration into the teacher training system. The publication consists of a competency framework and core as well as supplementary training modules. The program updated in 2021, titled 'Media and Information Literate Citizens: Think Critically, Click Wisely!', was presented as an expanded resource for educators and learners. It connects media and information literacy with artificial intelligence, digital citizenship, cultural literacy, misinformation, and disinformation issues. This program provides an international methodological foundation for defining the content of media competence based not only on technical skills, but on critical evaluation, content creation, and responsible use.

The DigCompEdu [4] model developed by C. Redecker describes the digital competence of educators through 22 competencies across six areas. The model links digital technologies with professional collaboration, creation of educational resources, teaching, assessment, personalization of learning, and development of learners' digital competencies. Its significance in forming students' media competence is manifested in defining critical assessment of information, digital content creation, and responsible use as an integral part of pedagogical activity. For this reason, DigCompEdu can serve as a theoretical-methodological support in developing a methodology based on harmonizing digital tools, teaching methods, and assessment criteria.

When studying the topic, a meta-analysis of 40 years of research by H. Cho, C. Carpenter, and W. Li [5] was also examined. It analyzed 160 media literacy interventions from 1983 to 2023. The main results are as follows:

- • Media literacy interventions had a positive effect.
- • A stronger effect was identified in knowledge-related outcomes.
- • In certain outcomes, the effect of online teaching was smaller than that of face-to-face teaching.

[3] Jaakkola, M. (2025). Domestication of Media Literacy theory in a non-western context: Models of Media and Information Literacy (MIL) in academic discourse in Uzbekistan. Media Education, 16(2). DOI: 10.36253/me-17693. Nashr sanasi: 2025-yil 30-dekabr.

[4] Redecker, C. (2017). European Framework for the Digital Competence of Educators: DigCompEdu. Y. Punie, tahr. Publications Office of the European Union. DOI: 10.2760/159770. JRC107466.

[5] Cho, H., Carpenter, C. J., & Li, W. (2025). Media literacy interventions: Meta-analytic review of 40 years of research. Human Communication Research, 51(2), 57–79. DOI: 10.1093/hcr/hqaf004

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● • Interventions focused on social networks showed a smaller effect in certain outcomes compared to other interventions.

● • Behavioral outcomes were more complex than knowledge outcomes and required cautious interpretation.

The study supports a reasoned approach stating that 'when digital technology is used, education does not automatically improve', but rather 'a digital tool yields results when combined with a clear pedagogical strategy and appropriate assessment'.

CONCLUSION: Summarizing the conducted scientific-theoretical analyses and international as well as domestic experiences, the following conclusions were reached:

● • The use of digital technologies in itself does not automatically increase educational quality; digital tools give the expected result only when combined with a clear pedagogical strategy, interactive didactic task design, and appropriate assessment criteria.

● • It was identified that students' active use of digital information is not identical to their competence to critically verify it. In particular, developing special methodological tasks aimed at checking visual information, identifying fake data, and finding the original source is an urgent task.

● • When applying foreign media competence models (DigComp 2.2, DigCompEdu, and others) to the educational system of Uzbekistan, it is of crucial importance not to simply copy them, but to adapt them to national educational conditions and the local information environment.

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