



## Peculiarities Of Developing Information Competence In Future Primary School Teachers

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### ABSTRACT

The article explores the key aspects of developing information competence in future primary school teachers within the context of education digitalization.

### ARTICLE INFO

**Received:** 11<sup>th</sup>

April, 2026

**Accepted:** 10<sup>th</sup> May 2026

### KEY WORDS:

information competence, future teacher, primary school, digital pedagogy, media literacy, critical thinking, ICT competence, digital safety, multimedia projects, teacher training.

**Аннотация.** В статье рассматриваются ключевые аспекты формирования информационной компетентности у будущих учителей начальных классов в контексте цифровизации образования.

**Ключевые слова:** информационная компетентность, будущий учитель, начальная школа, цифровая педагогика, медиаграмотность, критическое мышление, ИКТ-компетентность, цифровая безопасность, мультимедийные проекты, подготовка учителей.

**Annotatsiya.** Maqolada ta'limni raqamlashtirish sharoitida bo'lajak boshlang'ich sinf o'qituvchilarining axborot kompetentsiyasini rivojlantirishning asosiy jihatlari o'rganiladi.

**Kalit so'zlar:** axborot kompetentsiyasi, bo'lajak o'qituvchi, boshlang'ich maktab, raqamli pedagogika, media savodxonligi, tanqidiy fikrlash, AKT kompetentsiyasi, raqamli xavfsizlik, multimedia loyihalari, o'qituvchilar malakasini oshirish.

In the context of rapid technological advancement and the widespread informatization of education, the development of information competence among future primary school teachers has become particularly relevant. At the present stage, educators must possess basic skills in working with information and communication technologies and be able to critically evaluate, structure, and effectively utilize information in the educational process. Information competence is viewed as a key professional quality that ensures a teacher's readiness to organize a digital learning environment, foster information-handling skills in young learners, and lay the foundation for their information culture. In this regard, a scientifically grounded approach is required to develop methods and conditions that contribute to the purposeful formation of information competence in future primary

For the effective formation and development of information competence in future primary school teachers, it is essential to take into account the following specific features of this process:

1. *Age-specific characteristics of students.* The developmental features of younger schoolchildren are reflected in their limited attention span, evolving motor skills, and the formation of basic understanding of digital interfaces. Therefore, when selecting digital resources, the teacher must consider how well the platform or application aligns with the psychological and cognitive abilities of children at a particular age. [4]

Older primary school students (grades 3–4) are already capable of working with more complex interfaces and processing content that requires active thinking and planning. For them, educational platforms are appropriate when they offer task structures with multiple levels of difficulty, thematic categorization of materials, and the opportunity to independently choose their own learning paths.

2) *Ensuring children's safety online is becoming a top priority.* The online environment represents a multi-layered informational landscape in which younger students encounter a variety of threats — from inappropriate content and intrusive advertising to cyberbullying, phishing, and social engineering attempts. Their lack of critical experience in recognizing dangerous situations, trust in virtual interlocutors, and insufficient skills in protecting personal data make children vulnerable. As a result, the primary task of the teacher is not only to explain the technical capabilities of the Internet, but also to instill a strong understanding of threat mechanisms, how they are implemented, and ways to counter them. [1]

3) *Developing creativity through multimedia projects and creative tasks using information and communication technologies.* The integration of multimedia technologies into project-based activities creates an environment for younger students to freely experiment with various formats of expressing their thoughts and emotions. When planning a multimedia project, the teacher defines a research or creative problem that children will address by creating a digital product. This could be a short video about the nature of their local area, a podcast interview with a classmate, an interactive presentation on the topic “My Family”, or a virtual tour of the schoolyard. [3]

4) *Developing students' critical thinking skills when working with information.* Critical thinking when working with information involves a student's ability not merely to receive incoming data, but to analyze it thoughtfully, compare it, and evaluate it within the context of the learning objectives. At the core of this process lies the skill of asking conscious and purposeful questions such as: “Who is the author of the source?”, “What is the purpose of presenting this material?”, “What evidence is provided and how reliable is it?” [5]

Modern digital tools and educational platforms expand the opportunities for developing critical thinking in an age of information abundance. Interactive case studies and online simulations create modeled situations in which students encounter conflicting data and independently construct algorithms for verifying and selecting information. Group work in virtual classrooms allows for role distribution between “researcher” and “reviewer,” enabling each child to gain both in-depth engagement skills and the ability to constructively critique others' work. Reflection remains a vital stage: discussions in the format of “what was difficult” help reinforce students' understanding of how cognitive biases can influence their perception of information and foster a habit of continuous self-evaluation and analytical thinking. [2]

The development of information competence requires specialized methodological support, where theoretical training is combined with practical exercises and reflection. It is important for educational programs to include modules on media literacy, digital safety, and project-based learning, as well as tasks involving the creation of multimedia products and the organization of electronic interaction. A differentiated approach that takes into account the age-specific characteristics of younger students ensures the selection of appropriate interfaces and game-based forms of material delivery. Ensuring online safety through integrated lessons on digital hygiene and cooperation with parents creates a unified educational environment where the child receives both support and reliable protection. Regular analysis of the effectiveness of resources and formats used—through digital dashboards and collective discussions—enables teachers to continuously improve their practices and adapt them to the new challenges of the information society.

The development of critical thinking in younger schoolchildren requires systematic pedagogical support, in which learning to work with information becomes not an end in itself, but a means of cultivating an independent, logically structured, and responsible way of thinking. It is precisely through the ongoing practice of analysis, comparison, and reasoned evaluation of information that students lay the foundation for

intellectual autonomy—an essential condition for meaningful socialization in today’s information-rich environment.

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