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## **DIGITALIZATION OF PRESCHOOL EDUCATION: A COMPARATIVE ANALYSIS OF APPROACHES IN RUSSIA AND THE UNITED KINGDOM**

***Abstract:** this article examines the digitalization of preschool education in Russia and the United Kingdom. The study analyzes the regulatory frameworks governing the use of digital technologies in early childhood education, requirements for teachers' digital competence, and mechanisms for ensuring children's safety in the digital environment in both jurisdictions. Particular attention is paid to differences in regulatory models, strategies for technology integration, and the role of the state.*

***Keywords:** preschool education, digitalization, digital learning environment, early childhood education, Russia, United Kingdom, comparative analysis, child online safety.*

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## ЦИФРОВИЗАЦИЯ ДОШКОЛЬНОГО ОБРАЗОВАНИЯ: СРАВНИТЕЛЬНЫЙ АНАЛИЗ ПОДХОДОВ В РОССИИ И ВЕЛИКОБРИТАНИИ

***Аннотация:** в статье рассматривается цифровизация дошкольного образования в России и Великобритании. В исследовании анализируется нормативно-правовая база, регулирующая использование цифровых технологий в дошкольном образовании, требования к цифровой компетентности учителей и механизмы обеспечения безопасности детей в цифровой среде в обеих юрисдикциях. Особое внимание уделяется различиям в моделях регулирования, стратегиях интеграции технологий и роли государства.*

***Ключевые слова:** дошкольное образование, цифровизация, цифровая образовательная среда, обучение детей раннего возраста, Россия, Великобритания, сравнительный анализ, безопасность детей в интернете.*

### *Introduction.*

The rapid development of digital technologies has significantly transformed all levels of education, including early childhood education. Modern children grow up in a digital environment, encountering smartphones, tablets, computers, and interactive devices from an early age. This reality creates new opportunities for learning and development but simultaneously generates new challenges for educators, parents, and policymakers worldwide. Digitalization of preschool education involves the integration of digital tools, resources, and teaching methods into the educational process for 0–7-year-old children. This includes the use of educational applications, interactive displays, programmable robots, digital storytelling tools, and online learning platforms designed specifically for young children. However, digitalization also raises important questions about child development, screen time limits, online safety, data protection, and the changing role of the preschool teacher.

Both Russia and the United Kingdom have developed distinct regulatory approaches to integrating technology into early childhood settings while ensuring child safety and developmental appropriateness. These two countries represent

fundamentally different legal and pedagogical traditions, which are reflected in their approaches to digitalization of preschool education. In Russia, the legal framework for preschool education digitalization is based on the Federal Law «On Education in the Russian Federation," the Federal State Educational Standard for Preschool Education (FSES PE), and detailed sanitary regulations that establish specific technical requirements and time limits. The Russian model is characterized by centralized state control, formalized rules, and a strong emphasis on health protection. In the United Kingdom, regulation relies on the Early Years Foundation Stage (EYFS) Statutory Framework, which applies to all early years providers registered with Ofsted, and advisory guidance issued by the Department for Education and the UK Council for Internet Safety. The British model follows a flexible, principle-based approach that trusts the professional judgment of practitioners and encourages developmentally appropriate integration of technology. The purpose of this article is to conduct a comparative legal and pedagogical analysis of digitalization approaches in preschool education in Russia and the United Kingdom, identify key differences between the two systems, evaluate the effectiveness of various regulatory mechanisms, and consider modern international trends in early childhood digital education.

#### *Regulation of Digitalization in Russia.*

In the Russian Federation, the digitalization of preschool education is regulated through a centralized and formalized system of federal legislation, sanitary rules, and educational standards. The main legal documents include Federal Law No. 273-FZ «On Education in the Russian Federation," which establishes general principles for the use of electronic learning resources, and the Federal State Educational Standard for Preschool Education (FSES PE), which defines requirements for the developing subject-spatial environment, including technical means of education.

A distinctive feature of the Russian regulatory model is the presence of detailed sanitary rules that impose legally binding restrictions on children's interaction with digital devices. Sanitary Rules SP 2.4.3648–20 establish specific limits on continuous screen time depending on the age of the child. For children under three years of age, the use of interactive devices is generally not permitted. For children aged three to

four years, the maximum continuous screen time is limited to five minutes. For children aged four to five years, this limit extends to seven minutes. For children aged five to seven years, continuous use of electronic devices must not exceed ten minutes per session. These requirements are legally enforceable and subject to inspection by state supervisory authorities.

In addition to screen time limits, Russian sanitary regulations also establish technical requirements for digital equipment used in preschool settings. The state also plays a key role in controlling the certification of digital educational content. Digital learning resources intended for use in preschool settings must undergo expert review and obtain approval from the Ministry of Education. The Russian approach demonstrates a protective and restrictive philosophy regarding digitalization in preschool education. The system is highly standardized and safe, but digital technologies are used selectively, with traditional forms of activity remaining predominant. As a result, the digital transformation of preschool education in Russia remains at a transitional stage.

*Regulation of Digitalization in the United Kingdom.*

The United Kingdom follows a fundamentally different approach to digitalization in preschool education. Unlike the Russian system, which relies on detailed, legally binding technical regulations, the British system is based on general principles, professional autonomy, and advisory guidance. The Early Years Foundation Stage (EYFS) Statutory Framework serves as the primary regulatory document for all early years providers. The current EYFS framework explicitly includes technology as an area of learning and development, recognizing its importance in preparing children for life in a digital society.

A defining feature of the British approach is that the EYFS framework does not impose centralized, legally binding screen time limits. Instead, decisions regarding the extent, timing, and manner of technology use are made at the institutional level, based on the professional judgment of qualified early years practitioners. This reflects the principle of professional autonomy and trust in educators. The framework requires

practitioners to provide children with opportunities to use a range of technologies to support their learning alongside traditional activities.

Child online safety in the United Kingdom is addressed primarily through non-statutory guidance rather than mandatory norms. The UK Council for Internet Safety has published guidance documents for early years practitioners on safeguarding children and protecting professionals in early years settings. However, these recommendations are advisory in nature, and it is the responsibility of individual settings to implement appropriate policies based on their specific circumstances. The British approach is characterized by its flexibility and adaptability. Practitioners are expected to assess risks contextually and implement appropriate safeguards based on the age and needs of the children in their care. This contextual approach allows for innovation and experimentation.

#### *Comparative Analysis of Russia and the United Kingdom.*

The Russian and British approaches to digitalization of preschool education differ significantly in terms of regulatory philosophy, the role of the state, and strategies for technology integration. Russia applies a centralized, formalized, and restriction-oriented model focused on health protection and strict state control. The United Kingdom applies a flexible, principle-based model focused on developmental opportunity, practitioner autonomy, and adaptability to technological change.

One of the most significant differences lies in how digital technologies are conceptualized. In the Russian approach, digital devices are primarily viewed as a potential risk to children's health, requiring strict limitation. Screen time is minimized, and technology use is permitted only within narrow, centrally defined parameters. In the British approach, digital technologies are viewed as a developmental tool that can support learning when used appropriately. The emphasis is on what children can learn through technology, rather than on the risks.

Another important difference concerns decision-making. In Russia, decisions about technology use are made primarily by central authorities through binding sanitary rules. Educators have little discretion. In the United Kingdom, decisions are made at the institutional level by qualified practitioners. Child online safety is

addressed differently as well. In Russia, safety is ensured through mandatory technical requirements and certified content. In the United Kingdom, safety is addressed through advisory guidance, professional training, and institutional policies.

Despite these differences, both systems pursue common objectives: ensuring children's safety and healthy development, maintaining the quality of early childhood education, and preparing children for life in a digital society.

#### *Child Online Safety as a Core Element.*

The protection of children from online risks is a central concern in both systems. In Russia, child online safety is ensured through mandatory sanitary rules, state certification of digital resources, and technical restrictions. Preschools must install content filtering software and maintain internet access logs. The Russian approach prioritizes standardized, top-down protection.

In the United Kingdom, child online safety is regulated through advisory guidance rather than mandatory norms. Practitioners assess risks contextually and implement safeguarding measures based on professional judgment. Ofsted inspects settings against the EYFS framework but does not prescribe specific technical solutions. Thus, Russia prioritizes standardized protection, while the United Kingdom prioritizes contextual professional judgment.

#### *Conclusion.*

The comparative analysis demonstrates that Russia and the United Kingdom apply fundamentally different approaches to digitalization of preschool education. Russia follows a centralized, formally strict, and protective model characterized by detailed sanitary regulations, binding screen time limits, and state certification of digital content. The United Kingdom follows a flexible, principle-based model characterized by non-statutory guidance, practitioner autonomy, and technology integration across the curriculum.

Both approaches have strengths and limitations. The Russian system provides clear, enforceable rules that ensure a baseline level of safety across all preschool settings but may restrict innovation. The British system encourages innovation and professional development but may lead to variation in practice. Despite these differ-

ences, both systems aim to ensure children's safety, healthy development, and quality of early childhood education in the digital age.

### ***References***

1. Department for Education (UK). Early Years Foundation Stage (EYFS) Statutory Framework for Group and School-based Providers. London, 2024. URL: <https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2> (date of request: 03.05.2026).

2. On Education in the Russian Federation: Federal Law No. 273-FZ of December 29, 2012 // ConsultantPlus legal reference system. URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_140174/](http://www.consultant.ru/document/cons_doc_LAW_140174/) (date of request: 03.05.2026).

3. On Approval of the Federal State Educational Standard for Preschool Education: Order of the Ministry of Education and Science of the Russian Federation No. 1155 of October 17, 2013 (as amended on January 21, 2019) // ConsultantPlus legal reference system. URL: <https://fgos.ru/fgos/fgos-do/> (date of request: 03.05.2026).

4. Sanitary Rules SP 2.4.3648-20 «Sanitary and Epidemiological Requirements for Organizations of Upbringing and Education, Recreation and Health Improvement of Children and Youth.» Approved by Chief State Sanitary Doctor of the Russian Federation on September 28, 2020 // ConsultantPlus legal reference system. URL: [http://www.consultant.ru/document/cons\\_doc\\_LAW\\_471022/](http://www.consultant.ru/document/cons_doc_LAW_471022/) (date of request: 03.05.2026).

5. UK Council for Internet Safety (UKCIS). Safeguarding Children and Protecting Professionals in Early Years Settings: Online Safety Guidance for Practitioners. UKCIS, 2019. URL: <https://dera.ioe.ac.uk/id/eprint/32819/> (date of request: 03.05.2026).