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Digitalization of inclusive education: approaches to management and policy initiatives at the state and municipal levels

Tatiana N. Bun¹ , Yulia S. Kuznetsova² , Victoria R. Zayec³

¹Moscow City University, Moscow, Russian Federation

²Admiral Ushakov Maritime State University, Novorossiysk, Russian Federation

³RUDN University, Moscow, Russian Federation

buntn@mgpu.ru

Abstract. This study examines the changing landscape of inclusive education in the era of digital transformation, with a special focus on the innovative role of media classes. Designed to provide equal learning opportunities for students with disabilities, inclusive education aims to ensure accessibility while promoting meaningful social integration. Media classes are an example of this approach, using digital platforms and adaptive technologies to create a personalized learning environment that meets the diverse needs of students. These classes provide access to advanced tools and resources that support both academic achievement and the development of basic practical skills, including digital literacy and multimedia content creation. The discussion highlighted how digital platforms enhance the quality of education through features such as accessibility, personalized learning paths and increased engagement. Tools such as screen readers, text-to-speech technologies, and learning management systems enable students to interact with educational content in a way that suits their specific sensory, cognitive, or physical needs. By encouraging autonomy and independent learning, these technologies enable students to organize their own educational journeys. However, the study also examines the problems that hinder the full integration of digital technologies into inclusive education. Insufficient infrastructure, inadequate teacher training and limited financial resources are identified as the main obstacles. The need for strategic planning in infrastructure development, teacher training and curriculum innovations is emphasized to ensure the effective implementation of inclusive practices. The study concludes by highlighting the significant social and professional benefits of integrating digital technologies into inclusive education. By providing students with disabilities with the skills and knowledge they need to succeed in an increasingly digital world, these initiatives not only expand individual potential, but also contribute to a more inclusive and equitable society. The study calls for an active policy and continuous efforts to support the continuous development of inclusive educational systems.

Keywords: accessibility of educational technologies, innovations in pedagogy, integration of students with disabilities, adaptation of curricula, personalized learning, support for educational policy, multimedia resources in education, digital learning tools, educational inclusion, inclusive learning environment, equal educational opportunities, digital educational infrastructure, professional integration of students, government education management, educational policy strategies

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Цифровизация инклюзивного образования: подходы к управлению и политическим инициативам на государственном и муниципальном уровнях

Т.Н. Бунь  ¹, Ю.С. Кузнецова² , В.Р. Заец³ 

¹Московский городской педагогический университет, Москва, Россия

²Государственный морской университет имени адмирала Ф.Ф. Ушакова, Новороссийск, Россия

³Российский университет дружбы народов, Москва, Россия

 buntn@mgpu.ru

Аннотация. Проанализирована роль инклюзивного образования в контексте цифровизации, при этом особое внимание уделяется медиаклассам как инновационному решению. Инклюзивное образование направлено на обеспечение равных возможностей для обучения учащихся с ограниченными возможностями, создание доступной образовательной среды и содействие их социальной интеграции. Медиаклассы, благодаря использованию цифровых платформ и адаптивных технологий, предлагают персонализированную образовательную среду, отвечающую разнообразным потребностям учащихся. Это включает в себя доступ к современным инструментам, которые поддерживают как теоретическое обучение, так и развитие практических навыков: цифровую грамотность и создание мультимедийного контента. Особое внимание уделено роли цифровых платформ в повышении доступности, персонализации и вовлеченности в процесс обучения. Использование таких технологий, как программы для чтения с экрана, синтезаторы речи и системы управления обучением, повышает качество образовательных услуг. Адаптивные инструменты позволяют учащимся с сенсорными, когнитивными или физическими недостатками получать доступ к учебным материалам в удобных для них форматах, что способствует их автономии и самоорганизации. Несмотря на достижения, отмечены существующие проблемы, в т.ч. отсутствие инфраструктуры, недостаточная подготовка преподавателей и ограниченное финансирование. Для преодоления этих барьеров предложен стратегический подход к развитию инфраструктуры, подготовке учителей и адаптации учебных программ. В заключение подчеркнуто то, что медиаклассы с использованием цифровых технологий предоставляют учащимся с ограниченными возможностями не только доступ к образованию, но и возможности для профессиональной подготовки и социальной интеграции. Это способствует развитию навыков, востребованных в современном медиaprостранстве, и успешной интеграции таких студентов в профессиональную среду и общество. Для дальнейшего развития инклюзивного образования важно продолжать совершенствовать техническую инфраструктуру, обучать

учителей использованию инновационных методов и обеспечивать устойчивое внедрение цифровых технологий в образовательный процесс. Комплексный подход к медиаобразованию обеспечит равные возможности и станет основой для создания более инклюзивного и справедливого общества.

Ключевые слова: доступность образовательных технологий, инновации в педагогике, интеграция студентов с ограниченными возможностями здоровья, адаптация учебных программ, персонализированное обучение, поддержка образовательной политики, мультимедийные ресурсы в образовании, инструменты цифрового обучения, образовательная инклюзия, инклюзивная среда обучения, равные образовательные возможности, цифровая образовательная инфраструктура, профессиональная интеграция студентов, государственное управление образованием, политические стратегии в образовании

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Introduction

Inclusive education, which aims to create an accessible and supportive learning environment for children with disabilities within the framework of basic educational systems, is a fundamental element of modern educational policy [1]. This paradigm is based on the principle of equal educational opportunities for all students, regardless of their physical, mental or sensory problems. The importance of inclusive education goes beyond simply providing access to educational resources; It plays a vital role in promoting social development, integration into society and professional self-determination of students with disabilities. By promoting inclusive practices, education contributes to building a more tolerant and empathetic society, facilitating mutual learning of all participants in the educational process [2].

Digital technologies and media tools are important components of the transformation of inclusive education. At the heart of this transformation are media classes that create a specialized environment that meets the individual needs of students with disabilities [3]. These classes use advanced digital tools not only to increase the accessibility of education, but also to provide students with the skills necessary for professional integration. Media technologies play a crucial role in adapting educational content to the diverse needs of students, ensuring inclusivity and accessibility of education for students who might otherwise face obstacles in traditional educational institutions.

The role of media technologies in supporting inclusive education is becoming increasingly obvious [4]. By facilitating the creation of customized educational content in various formats such as text, video, audio, and interactive elements, digital tools ensure that learning is accessible to students with different sensory and cognitive needs. These resources make it possible to develop adaptive programs that take into account individual learning styles of students, which is especially important for people with special educational needs [5].

In addition, digital tools and media technologies contribute to the professional development of students with disabilities, facilitating their integration into the workforce [6]. These technologies provide not only theoretical knowledge, but also practical skills in areas such as digital literacy, multimedia production and information management, which are necessary in the digital age. Thus, media classes serve as a platform for both education and professional identity development, which significantly improves the employment prospects of students with disabilities.

Utilizing Media Technologies for Inclusive Education and Vocational Training

The integration of media technologies opens up transformative potential for inclusive education, in particular by allowing students with disabilities to adapt their learning experiences. This approach not only aligns educational processes with individual needs, but also gives students skills that are in demand in the modern labor market. Inclusive education continues to develop in Russia, providing equal opportunities for students with disabilities [7]. The cornerstone of this inclusive system is the State Final Exam, which takes into account the health-related needs of these students through alternative assessment formats. Unlike the Unified State Exam, the GIA includes both written and oral options, as well as flexible conditions such as extended time, assistive technology and support staff, which provides a favorable and fair environment for completing education. Access to media classes in Moscow schools is closely linked to the results of the GIA [8]. These classes are part of the Moscow School Media Class initiative and are specifically designed to integrate advanced media technologies into the educational and vocational training of students with disabilities. Educational institutions apply individualized admission processes and modify the curriculum to meet the unique needs of these students, using specialized tools and adaptive technologies to support skill development and smooth integration into the learning process. Media classes give priority to creating an inclusive educational environment that takes into account the diverse needs of students with disabilities. This is achieved through the use of digital tools such as voice recognition software for input and speech synthesis for output, which increases accessibility and engagement. The curriculum is adapted to solve health-related problems by adjusting the complexity of tasks and increasing the time to complete tasks, which further meets the individual needs of students.

In addition to academic classes, media classes play an important role in promoting social integration. Joint projects and team learning activities develop the necessary communication and professional skills, preparing students both for participation in society and for future work. By accepting students through SFE, these classes provide a fair educational foundation, while at the same time giving students the opportunity to acquire the competencies necessary for professional and social adaptation. Thus, media classes represent a groundbreaking innovation in inclusive education, combining modern media technologies with individual approaches to learning [9]. They offer a flexible and adaptive environment that takes into account the diverse needs of all students, especially those with disabilities, thereby improving their educational and professional trajectories. The strategic use of these technologies not only increases accessibility and personalization, but also increases the overall effectiveness of the learning process, ensuring that students are well prepared for both academic and professional success [10].

Using Digital Platforms and Adaptive Technologies in Inclusive Education

For people with disabilities, media classes create an environment conducive to successful integration into education through the provision of individual educational programs, special support from tutors and access to specialized equipment and software. Admission through the State final exams helps to create a sense of equality in the educational process for these students and allows them to realize their potential in an environment that recognizes and takes into account their special needs and characteristics.

Digital platforms and adaptive technologies play a key role in improving the quality of education for students with disabilities, ensuring the availability of educational materials adapted to their individual requirements [11]. The integration of these technologies into the education system not only creates favorable conditions for learning, but also increases the effectiveness of knowledge acquisition, skills development and vocational training.

Digital platforms open up many opportunities for students with disabilities. Platforms such as Google Classroom, Moodle, Microsoft Teams and other learning management systems provide electronic access to educational content, which greatly simplifies the interaction of students with special educational needs with materials. For example, students can work with materials in a way that is convenient for them, using tools to enlarge text or convert it into an audio format. Moreover, these platforms allow teachers to use a variety of media content, including video, audio and presentations, which increases the interactivity and diversity of the educational process. This is especially important for students with cognitive impairments who may have difficulty processing information in traditional written formats.

Adaptive technologies provide customized solutions tailored to students with various disabilities. For visually impaired students, screen readers and text enlargements make it easier to access digital materials. Students with

hearing impairments can use subtitles and transcripts for video tutorials, as well as specialized devices that convert audio to text in real time. Students with motor impairments have access to adaptive input devices such as large-key keyboards, voice control capabilities, or eye tracking technology. These technological innovations democratize the learning process, allowing students to participate on an equal footing, regardless of their physical limitations. In addition, digital platforms provide constant feedback and allow you to monitor progress. Teachers can observe and analyze student performance, adapt educational resources or methods accordingly, and provide individual support if necessary. This adaptability is important for students with disabilities, who may take a long time to assimilate information or benefit from individual learning. Digital technologies provide the flexibility needed to meet these needs without imposing strict time constraints. The impact of digital platforms and adaptive technologies on improving the quality of education for students with disabilities can be expressed in several key aspects:

- *Increased accessibility*: digital resources provide students with disabilities with access to educational materials in convenient formats, thereby contributing to the creation of a more inclusive educational environment.
- *Personalization of learning*: adaptive technologies allow the educational trajectory to be tailored to the unique needs of each student, promoting better understanding and retention of material, which in turn improves academic outcomes.
- *Increased engagement and motivation*: interactive features such as video content, interactive assignments and the ability to work with materials in various formats make the learning process more exciting and stimulating. This is especially useful for students with disabilities who may find traditional learning approaches less effective.
- *Autonomy and Self-regulation*: digital tools allow students with disabilities to control their learning process, allowing them to choose their preferred pace and learning mode. Such autonomy promotes the development of self-regulation skills and personal responsibility for one's educational progress.
- *Social and Academic integration*: digital platforms promote the socialization of students with disabilities by allowing them to participate in group projects and communicate with peers and teachers. Such integration contributes to both their social and academic development.

Thus, digital platforms and adaptive technologies significantly improve the quality of education for students with disabilities. They not only make education more accessible, but also increase its effectiveness, thereby supporting the academic achievements and professional success of these students [11].

Conclusion

Inclusive education is the cornerstone of the development of modern education aimed at ensuring equal opportunities for all students, including people with disabilities. In the era of digital transformation, multimedia classrooms stand

out as an innovative solution that plays a crucial role in integrating students with disabilities into the general education system. These classes use advanced media technologies and customized programs that promote the acquisition of skills and professional development in the field of media, communications and information technology. Through state graduation exams, these programs provide equal access, meeting the unique needs of students with disabilities and preparing them for a competitive job market.

Digital platforms and adaptive technologies play a vital role in improving the quality of education for students with disabilities. These tools support personalized learning, make educational content accessible, and bring flexibility to teaching and learning processes. In addition to improving the learning process, they promote the social integration of students with disabilities by teaching them the skills necessary to participate fully in academic, professional and social contexts.

However, despite these achievements, problems persist. Limited access to necessary equipment, insufficient teacher training and insufficient institutional support hinder the full integration of digital technologies into inclusive education. Addressing these challenges requires a multidimensional strategy that prioritizes infrastructure development, continuous teacher training, and curriculum adaptation tailored to the specific needs of students.

Government and institutional support is needed to overcome these barriers. By expanding media technologies and inclusive programs, policy makers can ensure that educational systems are ready to teach a variety of students. Investing in these areas will create an environment that allows all students, regardless of physical or cognitive problems, to participate fully in education and society.

In conclusion, it should be noted that media classes equipped with digital technologies provide not only academic knowledge; they contribute to professional growth and social integration. By bringing education in line with the demands of the digital age, these classes prepare students with disabilities to fully participate in work and society. Continued focus on infrastructure, teacher training, and the strategic adoption of digital tools will ensure that media classes continue to be a transformative force paving the way for a more inclusive and equitable future in education.

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Information about the authors:

Tatiana N. Bun — Specialist of the Institute of Specialized Training Development Liberal Arts in Prevocational Education, Moscow City University, 6A Vorontsovskaya st., bldg. 1, Moscow, 109044, Russian Federation (ORCID: 0009-0009-1157-8186) (e-mail: bunt@mgpu.ru).

Yulia S. Kuznetsova — PhD of Pedagogic Sciences, Associate Professor at the Department of Foreign Languages, Admiral Ushakov Maritime State University, 93 Lenina st., Novorossiysk, 353924, Russian Federation (ORCID: 0000-0002-1388-6125) (SPIN-code: 6207-0168) (e-mail: julx@bk.ru).
Victoria R. Zayec — Student of the Department of Foreign Languages, RUDN University, 6 Miklukho-Maklaya st., Moscow, 117198, Russian Federation (ORCID: 0009-0000-1385-9517) (e-mail: 1132231797@rudn.ru).

Информация об авторах:

Бунь Татьяна Николаевна — специалист Института развития профильного обучения, Московский городской педагогический университет, Россия, 129226, Москва, ул. Воронцовская, д. 6, корп. 1 (ORCID: 0009-0009-1157-8186) (e-mail: buntn@mgpu.ru).

Кузнецова Юлия Сергеевна — кандидат педагогических наук, доцент кафедры иностранных языков, Государственный морской университет им. адм. Ф.Ф. Ушакова, Россия, 353924, Новороссийск, пр. Ленина, д. 93 (ORCID: 0000-0002-1388-6125) (SPIN-код: 6207-0168) (e-mail: julx@bk.ru).

Заец Виктория Романовна — студент кафедры иностранных языков филологического факультета, Российский университет дружбы народов, Россия, 117198, Москва, ул. Миклухо-Маклая, д. 6 (ORCID: 0009-0000-1385-9517) (e-mail: 1132231797@rudn.ru).