



## METHODOLOGY OF TEACHING THE SUBJECT OF INCLUSIVE EDUCATION IN A DIGITAL ENVIRONMENT

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### ABSTRACT

In the modern educational system, the effective organization of inclusive education based on digital technologies is considered one of the most pressing issues. This article explores the modern methodological foundations of teaching the subject of inclusive education in a digital environment, the role of digital technologies in activating the learning process for students with special educational needs, the development of inclusive competencies among teachers, and the impact of these technologies on the effective implementation of inclusive education in general education schools. In addition, the article presents methodological recommendations for the use of innovative digital tools, adaptive learning platforms, and distance education technologies in teaching the subject of inclusive education.

**KEYWORDS:** Inclusive education, digital technologies, methodology, pedagogical competence, adaptive learning, distance learning, special educational needs, individualization, integration, information and communication technologies, universal design.

### INTRODUCTION

At the current stage of societal development, improving inclusive education through digital technologies remains one of the most important tasks of the educational system. The Law of the Republic of Uzbekistan "On Education" [1] and the Presidential Decree No. PF-6084 dated October 13, 2020, "On measures to improve the system of education and upbringing of children with special educational needs" [2], provide the legal framework for the development of inclusive education.

Given the rapid development of digital technologies, there is a growing need to implement innovative approaches in the teaching of inclusive education. In particular, during the COVID-19 pandemic, the importance of distance learning technologies increased significantly, opening up new opportunities for inclusive education. The digital environment plays a crucial role in forming inclusive competencies among educators, expanding learning opportunities for students with special needs, and supporting their integration into society. [3]

The objective of this study is to examine the modern methodological foundations of teaching inclusive education in a digital environment, analyze international experiences, and propose effective methods for implementing this subject in higher education institutions of Uzbekistan.

### METHODOLOGY

Scientific research on teaching inclusive education in a digital environment can be conditionally analyzed in the following directions:

**1. The role and importance of digital technologies in inclusive education.**

Modern researchers, particularly D. Mitchell in his work "Effective Pedagogical Strategies in Inclusive Education," emphasize the significance of digital technologies in expanding learning opportunities for students with special needs, visualizing knowledge, and adapting learning materials. [4]

The UNESCO report "Inclusive Education and Digital Transformation" highlights that digital technologies enable the individualization of the inclusive learning process, allow for adjusting the pace of learning, and facilitate the adaptation of content and materials. Technologies such as artificial intelligence, augmented reality, and adaptive learning platforms are playing an increasingly important role in enhancing the effectiveness of inclusive education. [5]

**2. Methodology for using digital tools in teaching inclusive education.**

Studies by L. Florian and J. Spratt analyze the role of digital tools in shaping and developing teachers' inclusive competencies. According to them, digital simulations, virtual clinical case studies, and online collaboration platforms are effective tools for building knowledge and skills in future educators.

M. Ainscow's research highlights the importance of integrating digital technologies into inclusive education and supports the use of blended learning and flipped classroom methods in preparing future teachers for inclusive education.

**3. Digital competencies in inclusive education.**

R. Burgstahler, in his study "Universal Design for Learning in Higher Education," discusses the importance of universal design principles in inclusive education and their implementation in a digital environment. He argues that teachers' digital competencies are critical in determining the effectiveness of the inclusive learning process.

Research by E. Avramidis and B. Norwich explores the relationship between teachers' attitudes toward inclusive education and their digital competencies. The findings suggest that teachers with high digital competencies have more positive attitudes toward inclusive education and are more inclined to use innovative teaching methods. [7]

The main trends and priority directions in teaching inclusive education in a digital environment have been identified. However, in the context of Uzbekistan, there is a lack of comprehensive research on this issue, which determines the scientific and practical relevance of this article.

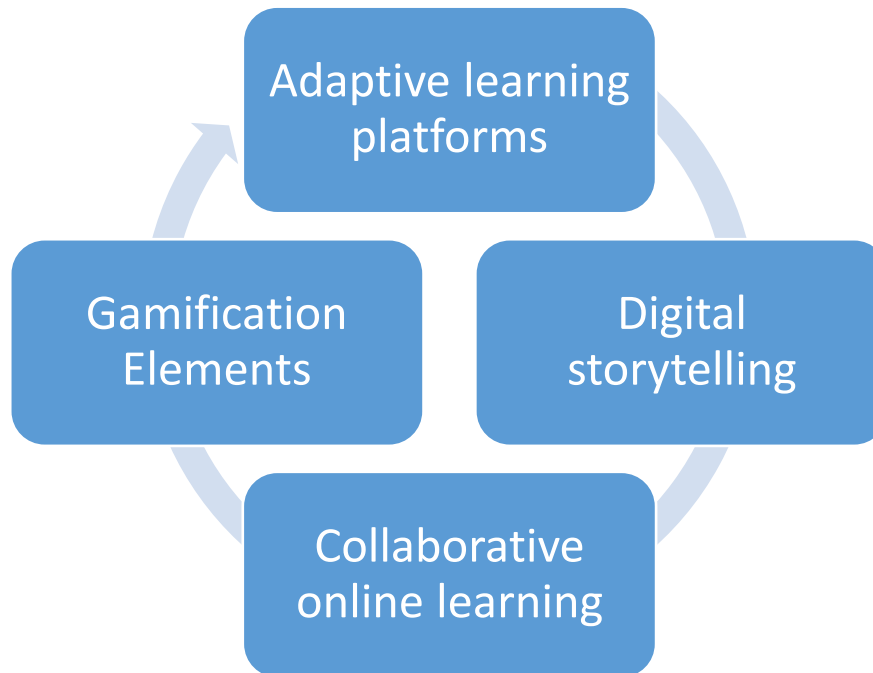
## DISCUSSION AND RESULTS

According to the results of the study, the following models for teaching the subject of inclusive education in a digital environment can be distinguished:

- **Blended Learning Model:** This model integrates traditional classroom sessions with elements of distance learning. In higher education institutions, this model allows students to acquire theoretical knowledge remotely while developing practical skills during face-to-face sessions.
- **Flipped Classroom Model:** In this model, students study theoretical materials independently in a remote format before class, while classroom time is dedicated to practical tasks, problem-solving, and case discussions. This approach helps develop students' critical thinking skills in the context of inclusive education.

- **Virtual Laboratory Model:** This model involves the use of digital simulations, 3D models, and virtual reality technologies in teaching inclusive education. It enables future educators to develop skills in working with students with special educational needs in a safe and controlled environment. [8]

Based on the study's results, the following innovative methods are considered effective for teaching the subject of inclusive education in a digital environment:



**Adaptive Learning Platforms.** These platforms adjust to students' knowledge levels, learning pace, and individual needs. For instance, by adapting the Moodle LMS (Learning Management System) platform to the subject of inclusive education, it is possible to develop personalized learning trajectories for each student.

**Gamification Elements.** The incorporation of game elements into the educational process enhances students' motivation and supports more effective assimilation of educational content. In the context of inclusive education, gamification encourages students' creative thinking and fosters engagement with course materials.

**Digital Storytelling.** The digital storytelling method helps future educators connect their theoretical knowledge of inclusive education with practical experience. Digital stories created by students facilitate the analysis of real-life situations related to inclusive education and help develop problem-solving skills.

**Collaborative Online Learning.** This method strengthens collaboration and communication among students. Through the formation of virtual groups, students work together on projects related to inclusive education, which contributes to the development of their communicative competencies. [9]

**International Best Practices in Teaching Inclusive Education in Digital Environments.** Analysis of international experiences has revealed several advanced practices for teaching inclusive education in digital contexts:

- **Finland's Experience:** In Finnish higher education institutions, digital competence labs have been established to develop future teachers' competencies in inclusive education. Within these labs, students use digital technologies to gain practical skills in working with learners who have special educational needs.
  - **South Korea's Experience:** South Korea has introduced the smart learning concept in teaching inclusive education. This approach involves the widespread use of adaptive learning platforms, mobile applications, and artificial intelligence technologies.
  - **Singapore's Experience:** Singapore utilizes learning analytics technologies in inclusive education courses. These technologies enable the collection and analysis of data on students' learning activities, thus allowing for the development of individualized learning trajectories.
- [10]

## CONCLUSION

In conclusion, digital technologies play a significant role in increasing the effectiveness of teaching the subject of inclusive education, as well as in shaping and developing inclusive competencies among future educators. Expanding international cooperation in the field of inclusive education and integrating advanced foreign practices into the national education system is both beneficial and timely.

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