

# "RAQAMLI TRANSFORMATSIYA DAVRIDA PEDAGOGIK TA'LIMNI RIVOJLANTIRISH **ISTIQBOLLARI**"



## FROM INCLUSIVE EDUCATION TO INCLUSIVE SOCIETY: A STUDY ON STRATEGIES, CASES, AND MODERN EDUCATIONAL TECHNOLOGY

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#### **ABSTRACT**

This study profoundly argues that inclusive education is a crucial path to mitigating educational inequality and ultimately building an inclusive society. Through a comparative analysis of the unique multicultural educational environment of Uzbekistan in Central Asia and the policy experiences of South Korea, we explore the differences and commonalities in inclusive education strategies based on each country's context. In this process, we examine the potential role of modern educational technology (EdTech) in promoting individualized learning, improving accessibility, and fostering collaborative communities. Furthermore, the author's personal experience teaching nutrition in Uzbekistan is presented as a concrete case, empirically illuminating how theoretical discussions are implemented in real-world educational settings and what implications they hold. This study reveals that inclusive education is not merely an auxiliary measure for specific student groups but a key driver for internalizing a society-wide value of inclusion by respecting the diversity of all learners and transforming the educational system itself. In conclusion, the study suggests the importance of developing teacher professionalism, providing technological support, and engaging in communal efforts to strengthen inclusive education, emphasizing that small changes in the educational field can collectively lead to a transition to an inclusive society.

**Keywords:** inclusive education, inclusive society, multicultural education, special education, educational technology, Uzbekistan education, Korean education.

### INTRODUCTION

Today, inclusive education is a key global topic, defined as a fundamental transformation of the educational system that guarantees equal opportunities for all learners, regardless of their diverse backgrounds.1 This paradigm shift is crucial for addressing educational disparities and is closely linked to the international community's efforts to build an inclusive society. This study focuses on the unique context of a multi-ethnic and multicultural nation, Uzbekistan, and uses the author's personal experience as a Korean instructor at Bucheon University in Tashkent to explore practical strategies for inclusive education.1 The research aims to balance theory and practice by analyzing the theoretical background of inclusive education, comparing the cases of Uzbekistan and South Korea, discussing the role of modern educational technology, and presenting a concrete case study from the author's nutrition class.1

### Theoretical Background

The Concept of Inclusive Education and the Transition to an Inclusive Society Inclusive education is a philosophy and practice that aims to provide equal educational opportunities for all learners by ensuring access and participation,



regardless of personal differences like gender, disability, socioeconomic background, or ethnicity.¹ It has evolved from the concept of 'integration,' which focused on incorporating specific groups like students with disabilities into the existing system, to a broader paradigm of 'inclusion' that requires the entire educational system to adapt to the diversity of all students.¹ This is because inclusive education is a crucial process and tool for building an inclusive society, a society where all members participate and have opportunities without discrimination.¹ The experience of mutual respect and collaboration learned in the classroom is expected to contribute to a more cohesive and integrated society in the future.¹

#### RESEARCH METHODOLOGY

This study comprehensively reviewed domestic and international prior research, as well as reports and related materials from international organizations like UNESCO, to establish the concept and significance of inclusive education. The core of the study is a detailed case review based on the author's experience teaching at a local university in Uzbekistan. Through this case, the study empirically presents the application and effectiveness of inclusive education strategies. In addition, it analyzes policies and statistical data on multicultural education and special education in South Korea and compares them with the case of Uzbekistan, thereby deeply deriving the commonalities and differences between the two countries.

Implementation Cases and Analysis of Inclusive Education

Practices and Challenges of Inclusion in Multicultural Classrooms in Uzbekistan Uzbekistan is a multi-ethnic nation where various languages are used for education, as shown in <Table 1>.¹ This diversity highlights the need for inclusive education to prevent students from being marginalized due to language barriers or cultural misunderstandings. The government aims to implement inclusive education in 51% of all schools by 2025 and is working with international partners like UNICEF to strengthen teacher professionalism and improve learning environments.¹ However, challenges remain, including limited teacher training in minority languages, resource disparities between urban and rural areas, and the persistence of social and cultural biases against students with disabilities and minorities.¹

Table 1. Distribution of School Education Languages in Uzbekistan

Language of Instruction	School Percentage(%)
Uzbek	80.0
Russian	7.6
Kazakh	3.5
Karakalpak	3.3
Tajik	2.2
Kyrgyz/Turkmen	less than 1.0

### South Korea's Inclusive Education Strategies and Key Policies

In South Korea, inclusive education has been pursued along two main axes: inclusive education for students with disabilities and educational support for multicultural students. The country has legally mandated inclusive education for students with disabilities since 2007, with approximately 72.8% of students with special education needs attending mainstream schools as of 2022.¹ While this has increased physical integration, issues of 'nominal inclusive education' and the need for more specialized support personnel persist.¹ For multicultural students, whose numbers have surged to over 181,000 by 2023, the government has implemented comprehensive support measures, including strengthening Korean language education, providing psychological support, and promoting multicultural understanding to address academic and social challenges.¹

# Comparative Analysis of South Korean and Uzbek Cases

A synthesis of the cases from South Korea and Uzbekistan shows that both countries share the goal of enhancing inclusivity but differ in their approaches based on their unique contexts, as summarized in <Table 2>.¹ Uzbekistan's long tradition of multilingualism contrasts with Korea's recent response to a rapid increase in multicultural students. Similarly, Korea has a more established legal and institutional framework for inclusive education for students with disabilities, while Uzbekistan is in an earlier phase of policy implementation. Despite these differences, both nations share common approaches such as strengthening teacher training, curriculum flexibility, and improving social awareness, demonstrating that inclusive education is a universal challenge.¹

Table 2. Comparison of Inclusive Education Strategies between South Korea and Uzbekistan

Category	Uzbekistan	South Korea
Multicultural Educational Environment	Traditional multi-ethnic, multilingual country(Uzbek/Russian-centric). Minority-language schools exist. Teacher training language limitation is a challenge.	Rapid increase in multicultural students (3-4% of total). Koreancentric classes + expanded Korean language education/multicultural understanding training.
Inclusive Education for Students with Disabilities	Transitioning from special schools to inclusion (expanding goals). Infrastructure improvement phase based on international cooperation.	Established legal/institutional basis.  Majority of students with disabilities attend mainstream schools.  Expanding co-teaching and auxiliary personnel.
Policy and Support System	Newly established inclusive training for teachers (expanding), pilot projects for facility improvement/assistive technology. Gradual strengthening of finance/professional staff needed.	Comprehensive inter-ministerial measures (language, learning, emotional support). Expanded special education teacher quotas and budgets, diversified support for multicultural parents/students.

Use of Educational Technology ICT infrastructure expansion phase.
Considering remote/blended classes,
promoting digital competency for
teachers.

Nationwide online platform experience. Support for devices/networks to reduce disparities, customized learning based on EdTech.

## The Role of Modern Educational Technology for Promoting Inclusion

The digital era offers new opportunities for inclusive education through technologies that aid in individualized learning and accessibility. Al-based adaptive learning systems, for example, can provide tailored content based on a student's pace and level, helping to reduce learning gaps and promote self-directed learning.<sup>1</sup> Similarly, assistive technologies like screen readers and voice recognition software lower barriers for students with disabilities by offering alternative means to access information and express themselves. Online platforms and collaborative tools also enhance the inclusivity of the learning community by providing a space for all students to participate, regardless of physical location or social disposition. For example, students who are reluctant to speak in person can express their opinions through chat or discussion forums. < Table 3> provides concrete examples of these applications. However, it is crucial to note that technology adoption can also deepen existing disparities if not accompanied by equitable access to devices and the internet. Ultimately, the effectiveness of educational technology depends on the teacher's digital competence and their belief in inclusivity, underscoring the need for comprehensive teacher training that focuses on inclusive pedagogical methods.1

Table 3. Examples of Using Modern Educational Technology for Inclusive Education

Technology/Strategy	Inclusive Application Effect	Classroom Application Example
Al-based Adaptive Learning	Customization for individual level·pace → reduces learning gap, promotes self-directed learning	Quizzes with automatic difficulty adjustment, personalized feedback dashboards
Assistive Technology/Accessib ility Features	Screen readers, voice recognition, subtitles, etc. → supports access to information and expression for students with disabilities	Lectures with automatic subtitle generation, voice-input reports
Online Collaborative Platforms	All-inclusive participation regardless of time·place → even hesitant students can participate via text/emoticons/polls	Collaborative document projects, discussion forums, real-time quizzes
Language Support Technology	Automatic translation-bilingual materials → improves understanding for multicultural-multilingual learners	Distributing Korean lectures + Russian subtitles/summaries

 VR/AR
 Immersive Learning
 Reduces mobility cost barriers → expands learning opportunities through indirect experience
 Virtual field hygiene processing), virtual museum tours

### Case Study and Insights from Nutrition Education in Uzbekistan

This section, based on the author's experience teaching in Uzbekistan, shows how inclusive education strategies can be applied in practice. The students came from diverse backgrounds with varying Korean language proficiency, which necessitated the use of inclusive teaching methods. The author utilized bilingual and visual materials, provided supplementary resources in Russian and English to support students with language barriers, and implemented collaborative group projects that encouraged students to share and analyze their respective cultural food traditions. In addition, individualized support was provided through supplementary sessions for students who struggled and advanced tasks for high-achievers. The use of technological tools like interactive response systems and multilingual subtitles also helped to increase student participation. These efforts led to tangible improvements in student confidence and engagement, demonstrating that a teacher's flexible and empathetic approach is crucial for creating a truly inclusive learning environment. This case study highlights that inclusive education, while requiring extra effort, leads to a more positive learning atmosphere and better outcomes, proving its value. It also underscores that successful inclusion is not merely a policy but a continuous process of mutual learning and adaptation for both teachers and students.1

### **CONCLUSION AND SUGGESTIONS**

This study confirmed that inclusive education is a key means of promoting social inclusion by addressing educational inequality and fostering a culture that respects diversity.\(^1\) The comparison of Uzbekistan and South Korea\(^1\)s cases highlighted the importance of context-specific approaches, with each country facing unique challenges related to its history and societal structure.\(^1\) The research also reaffirmed that the role and professionalism of teachers are crucial for the successful implementation of inclusive education, as is the strategic use of modern technology to overcome traditional barriers.\(^1\) Based on these findings, we suggest strengthening teacher training in inclusive pedagogies, implementing policies that ensure equitable access to digital technology, and fostering school-community collaboration to build a truly inclusive environment.\(^1\) Ultimately, inclusive education is not a final destination but a continuous journey toward a more equitable and cohesive society. The small changes that begin in the classroom, when sustained and expanded, will collectively lead to the transformation toward an inclusive society.\(^1\)

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