



Implementing Inclusive AI & ICT Policy in LMIC Contexts

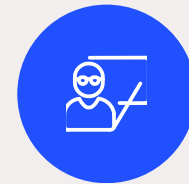
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- Founder of Ozim Platform & Ozim Academy
- Co-founder of the Association for the Development of an Inclusive Society
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- Researcher in Early Intervention and Inclusive Education
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Global Challenge



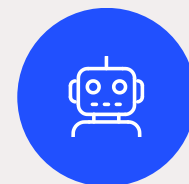
Growing number of children with developmental/special educational needs (UNESCO/UNICEF)



Teachers in LMICs often lack training in inclusive education



Digital inequality limits access to support



Risk: AI may reinforce exclusion if not culturally adaptive and inclusive

Kazakhstan Policy Context (with law details)

1

AI Development Concept 2024–2029: innovation-focused strategy

2

Law "On Artificial Intelligence" (2025) — first in Central Asia

3

Introduces formal definitions (AI, data library, synthetic content)

4

Core regulatory principles:

- Transparency & safety
- Human rights and data protection
- Mandatory labelling of AI-generated material
- Prohibition of harmful practices (manipulative AI, social scoring, emotion recognition without consent)

5

Alignment with UNESCO's AI Ethics Recommendation

☐ This creates a legal foundation for ethical, inclusive AI development in Kazakhstan

Research talks!

What are the advantages of using AI in education?



The integration of AI technologies into education dates back to the 1970s, when researchers explored how computers could make individualized learning accessible to everyone — an approach proven to be highly effective yet unavailable to most learners (Bloom, 1984).

Improved Learning Outcomes:

Adaptive AI systems show statistically significant improvements in cognitive performance compared to traditional methods (Chassignol et al., 2024, NPJ Digital Medicine).

Personalized Learning Pathways:

AI-based platforms tailor content, pace, and complexity to individual needs, increasing retention and engagement (Baker & Sahu, 2025, Education Sciences).

Early Detection of Risks and Growth Areas:

Behavioral and performance analytics enable prediction of academic success and emotional well-being (Zawacki-Richter et al., 2024, Expert Systems with Applications).

Increased Student Engagement:

Personalized AI environments enhance focus and participation, particularly in inclusive classrooms (Zhao et al., 2024, Computers & Education Open).

Reduced Teacher Workload:

AI automates routine tasks such as grading and content selection, allowing educators to focus on emotional and pedagogical support (UNESCO, 2024).

Alignment with Global Standards:

UNESCO and UNICEF frameworks emphasize ethical personalization and digital equity (UNESCO & UNICEF, 2025).



Ethical, Inclusive, and Fair Use of AI in Education

Erosion of Teacher Autonomy:

Overreliance on AI recommendations may reduce educators' decision-making power (Luckin et al., 2025).

Data Bias & Discrimination:

Algorithms trained on limited or biased datasets may amplify inequality among vulnerable groups (UNESCO, 2024).

Privacy & Data Security:

Sensitive behavioral and biometric data require strict protection and informed consent (UNICEF, 2024).

Lack of Algorithmic Transparency:

The “black box effect” undermines trust and interpretability (Floridi et al., 2024).

Digital Divide:

Schools with limited resources risk being excluded from transformation (OECD, 2025).

Ethical Data Practices:

Children as data subjects require “child-centered AI” protocols (Cowan et al., 2025).

Responsibility for AI Errors:

It remains unclear whether developers, teachers, or institutions are accountable for algorithmic mistakes (European Commission, 2025).

Data Collection and Predictive Analytics

In the AI era, data should be viewed as a tool for understanding rather than control



In inclusive education, the key question is **what** data are collected, **how** they are interpreted, and **who** manages them.



AI-supported analysis of children's developmental dynamics across emotional, attentional, and communicative parameters.



Ethical data practices enable educators and researchers to move beyond final results and instead understand each child's unique developmental trajectory.



Helping teachers make informed decisions based on observation, not assessment or grades.

Role of ICT & AI in Inclusion

ICT and AI offer new opportunities for development of children with special needs (AAC, personalization, progress tracking)

- ⚠ However, technology alone is ineffective without properly trained educators

"Technology does not create inclusion – trained professionals do."



Ozim Academy



● History

Launched in 2020, the Ozim Platform mobile app has provided expert guidance to over 6,000 families of children with special needs. We have developed 400+ educational materials, conducted 3 studies, received international awards, and been recognized by the UN as a Digital Public Good.

● Mission

We develop innovative solutions to train teachers and specialists working with children with special needs through inclusive approaches and evidence-based practices. Our goal is to strengthen professional capacity through practical training and AI-driven tools.

● Team

We are researchers and practitioners in inclusive education from the Ozim Platform Foundation, graduates of Nazarbayev University's Graduate School of Education, united by a vision to make high-quality training accessible to all professionals supporting children with disabilities.



Ozim Academy: Bridging Research and Practice

Research center

We built a research lab where our team studies early intervention and inclusive education in practice.

Digital Learning Resources

All validated research findings and practical insights will be transformed into structured online teacher-training courses, featuring interactive simulations for hands-on practice.

Practical Testing and Validation of Educational Methods

Our researchers work directly with children in a dedicated lab, running individual and group sessions to explore and design more effective learning approaches.

Advisory and Consulting Services

We support educational organizations in building inclusive systems and practices, offering evidence-based consulting and professional development aligned with global standards.

International dialogue

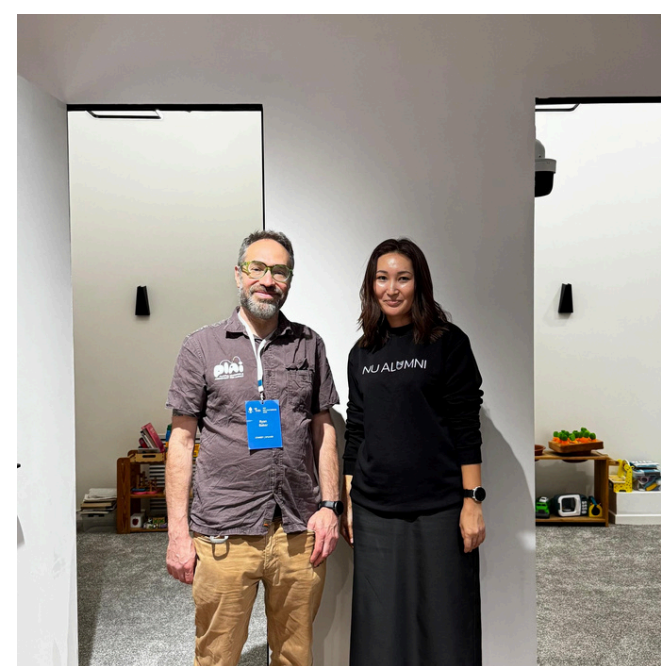
Ozim Academy actively contributes to the international discourse that defines the future of inclusive and digital education. We partner with leading scholars and global university experts in inclusive education and AI-enhanced learning



**Dr. Paul Kim,
Stanford University**



**Professor LO, Sing Kai
Hong Kong University**



**Dr. Ryan Baker
University of Adelaide**



**Dr. May Agius
University of Malta**



**Professor Kok-Sing Tang
Curtin University
Dr Davy Ng
Education University
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Thank You



We hope to further expand our cooperation and bring together all partners who share our commitment to ensuring that every child has access to quality education.

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