



**Use of AI and ICT to Support the
Inclusion of Learners with Autism,
ADHD, and Learning Difficulties**

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Two co-hosted webinars of UNESCO IITE and CCNU – Concept Paper

Date, time and virtual venue

1st Webinar

Wednesday, 19 November 2024

Time / @9am (CET)

Zoom

2nd Webinar

Thursday, 27 November 2024

Time / @9am (CET)

Zoom

**Use of AI and ICT to Support the Inclusion of Learners with
Autism, ADHD, and Learning Difficulties**

Background

Students with special needs and disabilities, including those with autism face significant challenges in accessing quality education tailored to their specific demands. Their right to inclusive and equitable education remains unfulfilled, leading to social and educational exclusion. Additionally, educators lack the training and resources needed to effectively teach students with disabilities, exacerbating these inequalities. Traditional educational systems often fail to provide the necessary support, leading to a gap in learning opportunities and outcomes. The integration of AI and ICT into special education can address these challenges by offering personalized learning experiences, yet many regions lack the resources and expertise to implement these technologies effectively.

UNESCO is uniquely positioned to address the challenges related to the education of students with disabilities through the integration of AI and ICT. As the leading UN agency for education, UNESCO has a long-standing commitment to promoting inclusive and equitable quality education worldwide, as reflected in its mandate to achieve SDG 4.

UNESCO IITE specifically focuses on the use of ICT in education, providing expertise in the development and dissemination of digital tools and resources. The Institute's work in advancing inclusive education through technology is well-documented, with numerous successful projects that have improved access to education for marginalized groups, including those with disabilities.

The recent research carried out by UNESCO IITE on how AI and ICT can support inclusion proposes an expanded 6Ps + 4Cs framework (People, Products, Pedagogy, Policy, Place, Provision + Capacity, Co-creation, Consistency, Conscience) to analyze and strengthen

inclusive use of digital tools. Evidence from literature, expert interviews, and global case studies revealed both innovative practices and systemic challenges. The expanded 6Ps + 4Cs framework was developed through analysis of global literature, expert interviews, and best-practice case studies, offering a comprehensive model for understanding inclusion through technology at multiple levels, from classroom practice to national policy.

To disseminate findings, share lived expertise, and build dialogue across practitioners, researchers, and policymakers UNESCO IITE will organize two webinars: Webinar 1- Innovations in Practice: Child- and Teacher-Focused Approaches and Webinar 2 - Systemic Innovation: Policy, Place, and Provision. The co-hosted online webinars are organized within the framework of the UNESCO-CCNU project, EmpowerEd: Enabling Inclusive teaching and learning through ICT and AI-Driven Solutions showcasing results of the Research and in the framework of UNESCO IITE flagship webinar series 'Harnessing Technology to Transform Education'.

Rationale

- Why it matters: Neurodiverse learners face barriers in mainstream classrooms due to gaps in pedagogy, technology fit, and systemic provision. AI/ICT can support communication, literacy, self-regulation, and participation, but only if embedded in inclusive ecosystems.
- How technology can help:
 - Child-facing innovations: AAC, robotics, AI-supported literacy, prompt engineering, and gamified learning enhance autonomy, engagement, and social inclusion,
 - Teacher-facing innovations: Professional development, AI fluency, co-design with practitioners, and classroom integration strategies strengthen inclusive pedagogy,
 - Systemic innovations: Policy alignment, ethical frameworks, sustainable provision, and equitable infrastructure ensure scalability and long-term impact.

This initiative aligns with UNESCO's global mandate to ensure inclusive, equitable, and quality education for all, and responds to growing international interest in how AI and digital transformation can reduce rather than reinforce inequities in education.

Objective

1. Share innovative practices that demonstrate how AI/ICT can support inclusion of neurodiverse learners.
2. Discuss systemic levers (policy, provision, ethics, infrastructure) needed to sustain equitable adoption.
3. Connect global voices, learners, practitioners, technologists, policymakers, in dialogue on inclusion.
4. Generate recommendations for integrating inclusive AI/ICT into practice, research, and policy agendas.

Together, the two webinars will serve as a platform for knowledge exchange and a springboard for future collaborative work under UNESCO's inclusive technology agenda, informing both capacity-building and policy dialogue initiatives.

Format

Two 1.5-hour interactive webinars combining short presentations, moderated discussions, and Q&A.

Each session will include up to four 8-minute presentations, a 10-minute synthesis from the lead author (Dr. May Agius), and a moderated panel discussion.

Sessions will be conducted in English via an online platform (Zoom), with live captioning where possible.

Target Audience

- Policymakers and education ministry officials.
- Teachers, therapists, and inclusion coordinators.
- Researchers and academics in education, technology, and inclusion.
- Technology developers and assistive technology specialists.
- International organizations, NGOs, and donor agencies.

Expected Outcomes

- Knowledge sharing: Practical and policy insights from multiple regions on the use of AI and ICT for inclusion.
- Networking: Strengthened links between policymakers, practitioners, researchers, and technology developers.
- Actionable recommendations: Inputs to guide future UNESCO programming, partnerships, and capacity-building initiatives.
- Visibility: Dissemination of the findings of the UNESCO report through global dialogue and community engagement.

Webinar 1 – Innovations in Practice: Child- and Teacher-Focused Approaches

Date: 19th November 2025 @9am (CET)

Duration: 1.5 hours

Focus:

Exploring how AI, ICT, and assistive technologies are used to enhance learning, communication, and participation of students with autism, ADHD, and learning difficulties. This session highlights how teachers and practitioners are driving inclusive innovation in classrooms and services.

AGENDA

Chair/Moderator: [To be confirmed – UNESCO representative or expert in inclusive technology/Dr May Agius]

0.00-0.10	Welcome and Introductions. Opening remarks. Contextual framing on systemic challenges in inclusive EdTech.	Dr. Tao Zhan, UNESCO IITE Director
0.10-0.20	Key insights of UNESCO’s recent research: Key insights from the 6Ps + 4Cs framework focusing on practice-based innovation.	Dr. May Agius
0.20-0.55	Innovative Practices focusing on Learners and Teachers. 4 presentations based on the Best Practices Publications.	
	Inclusive classroom implementation of literacy supports.	Sharon Borg Schembri (Occupational Therapist; AccessNow360, Malta)
	Building the MARVoc application for children with autism.	Prof Den al Thani (A-Sense Centre, Qatar)

	Therapist-technologist collaboration in robotics-assisted learning.	Dr Paulina Tsvetkova (Institute of Robotics, Bulgarian Academy of Sciences, Bulgaria)
	Using mainstream applications to support schoolwide digital notetaking.	Chris Bugaj (Assistive Technology Specialist for Loudon County Public Schools)
0.55-1.15	<p>Panel Discussion.</p> <p>Questions:</p> <ul style="list-style-type: none"> • What counts as innovation in inclusive practice? • What conditions are required to foster innovation with AI and ICT? • How are teachers and therapists adapting mainstream technologies for neurodiverse learners? • What professional development and support are required to sustain these innovations? • How can lessons from LMICs inform global inclusion strategies? 	Presenters above and Dr Neslihan Canpolat-Çiğ (Tokat Gaziosmanpasa University) (Panel member only)
1.15-1.25	Audience Q&A. Open discussion and reflections from participants.	
1.25-1.30	Closing Remarks. Summary, next steps, and link to publication and dissemination activities.	

Webinar 2 – Systemic Innovation: Policy, Place, and Provision

Date: 27th November 2025 @ 9am (CET)

Duration: 1.5 hours

Focus:

Addressing how inclusive technology can be scaled through coherent policy, sustainable infrastructure, and equitable provision.

This webinar explores governance models, funding, and cross-sector collaboration that enable inclusion at system level.

AGENDA

Chair/Moderator: [To be confirmed – UNESCO representative or expert in inclusive technology/Dr May Agius]

0.00-0.10	Welcome and Introductions. Opening remarks Contextual framing on systemic challenges in inclusive EdTech.	Dr. Tao Zhan, UNESCO IITE Director
0.10-0.20	Key insights of UNESCO’s recent research: Key insights from the 6Ps + 4Cs framework focusing on systemic alignment and sustainability.	Dr. May Agius
0.20-0.55	Systemic Innovative Practices. 4 presentations based on the Best Practices Publications.	Speakers to be announced at a later date
	Implementing inclusive AI/ICT policy in LMIC contexts.	Assem Tazhiyeva (OZIM Platform, Kazakhstan)
	Using Cooperative Gaming for Neurodiversity Affirming Inclusion and Capacity Building.	A/Prof Matt Harrison (University of Melbourne, Australia)

	Teacher-led systemic innovation through universal design and prompt engineering; Presenter and Panel Member.	Craig Smith (The Universal Sandpit, Australia)
	Schoolwide AT auditing.	David Curran (Inclusive Futures Lab, UK)
0.55-1.15	<p>Panel Discussion.</p> <p>Questions:</p> <ul style="list-style-type: none"> • How can policy connect more effectively to classroom realities? • What mechanisms ensure equitable provision and sustainability of inclusive technology? • How do governance and ethics frameworks shape responsible AI for education? • What strategies can foster inter-ministerial and multi-sector collaboration? 	<p>Presenters above and:</p> <p>David Banes (AI Alliance) – Panel Member</p> <p>Associate Professor Li Rui (Shaanxi Normal University, Xi’An) – Panel Member</p>
1.15-1.25	Audience Q&A. Open discussion and reflections from participants.	
1.25-1.30	Closing Remarks. Summary, next steps, and link to publication and dissemination activities.	