

# The UNICEF Guide on Assistive Technology for Inclusive Education

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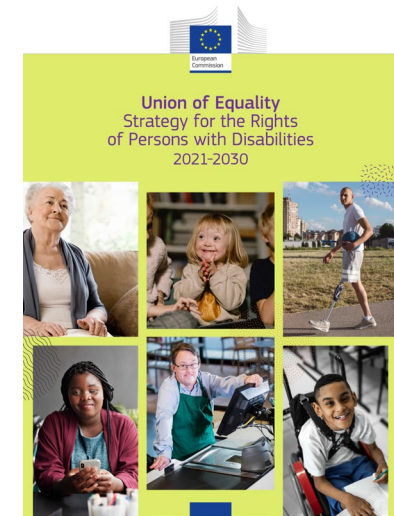
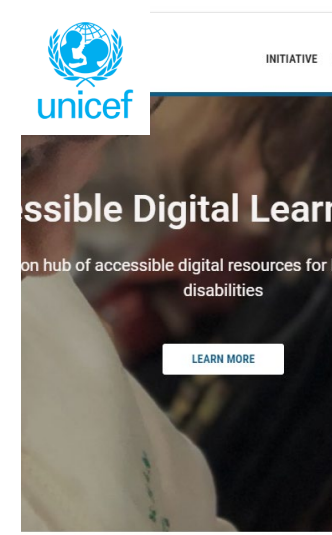
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# The Assistive Technology Ecosystem

## Global and Regional Initiatives



# Assistive Technology Ecosystem

## The role of education

### Emphasis on Service Delivery



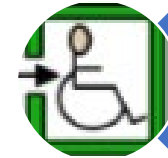
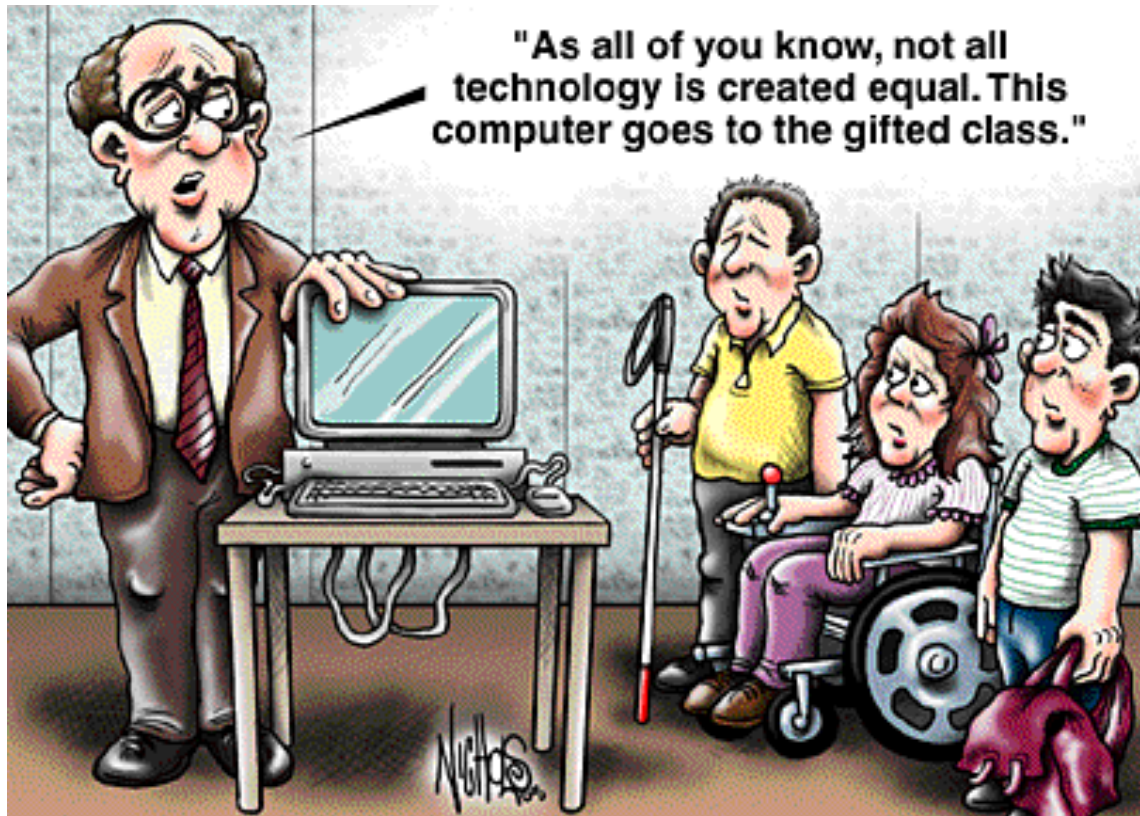
### The role of education

- Human rights: Inclusive Education
- Teamwork: multiple stakeholders and families
- Early in life: starting with AT early in life
- Competences: education is the means for competence development at all levels



# Why AT in education

## Multiple roles



Barrier-free



Increase functionality



Increase communication and participation

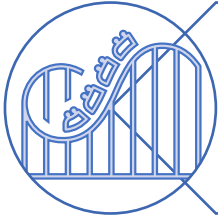


Digital learning



Childhood to adulthood

# The need for capacity development on AT in Education



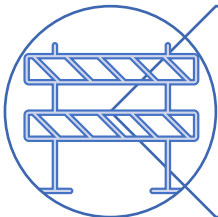
Educational changes: Assistive and digital technologies are becoming essential in the educational practice



Children: needs and condition constantly change -> appropriate AT provision is particularly important



Inclusive Education: Assistive and digital technologies have an essential role for inclusive education



Barriers: Lack of awareness and limited competences

# Target – Who: teachers and school teams

- **Schools:** Part of the AT service delivery system
- **Schools & Teachers:** Come very early in a child's life
- **Schools & Teachers:** Global and Regional call for educators' and schools' capacity development
- **Teachers:** define the learning process
  - Know their students (learners)
  - Know the curricula requirements
  - Define the learning objectives and anticipated outcomes
  - Work with other people: child, family, colleagues, support staff, other education and rehabilitation professionals
- Lack of awareness and limited teachers' and other stakeholders' competences are one of the main barriers to support inclusive education through assistive technology

# Target – What: Content for capacity development



Competences for AT and digital learning design



Principles of inclusive pedagogies



Assistive technology ecosystem



Principles of using assistive and accessible technology in learning



Principles of designing learning processes and activities with the use of AT

# Target – How: Approach followed

Existing sources of  
underlying concepts and  
resources





Consultation and peer  
review


- Co-decision with UNICEF support team
- Approvals of each step
- Consultation webinars with teachers and UNICEF representatives
- Peer review from other experts




# 4 Key factual assumptions

- 

1 Assess the needs and barriers to equal access and participation in the learning process for all learners
- 

2 Choose and integrate assistive technology in the design, development and implementation of learning activities based on inclusive pedagogies
- 

3 Identify the added value of assistive and accessible technology in removing barriers and increasing participation in education
- 

4 Work collaboratively in a whole school approach

# Competences



Broad perspective across levels and modes of education



No distinguished levels of competences and progression



Areas of competences covering different aspects of learning design with assistive technology



A tool for self-reflection and self-assessment



A tool for developing learning outcomes and training programs and modules

## Key Principles

Assess the needs and barriers to equal access and participation in the learning process for all learners

Identify the added value of assistive and accessible technology in removing barriers and increasing participation in education

Choose and integrate assistive technology in the design, development and implementation of learning activities based on inclusive pedagogies

Work collaborative in a whole school approach development and implementation of learning activities based on inclusive pedagogies

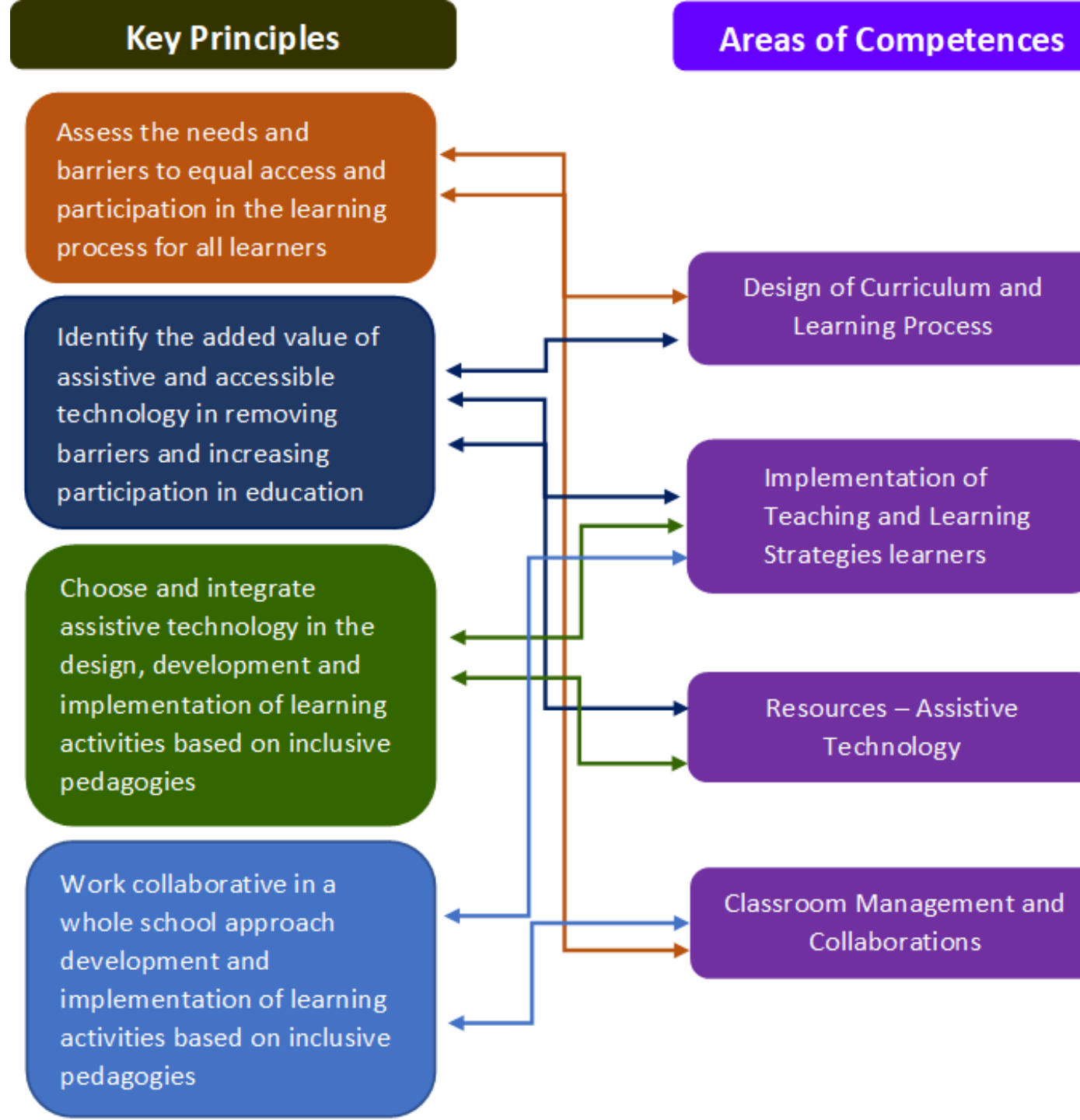
## Areas of Competences

Design of Curriculum and Learning Process

Implementation of Teaching and Learning Strategies learners

Resources – Assistive Technology

Classroom Management and Collaborations

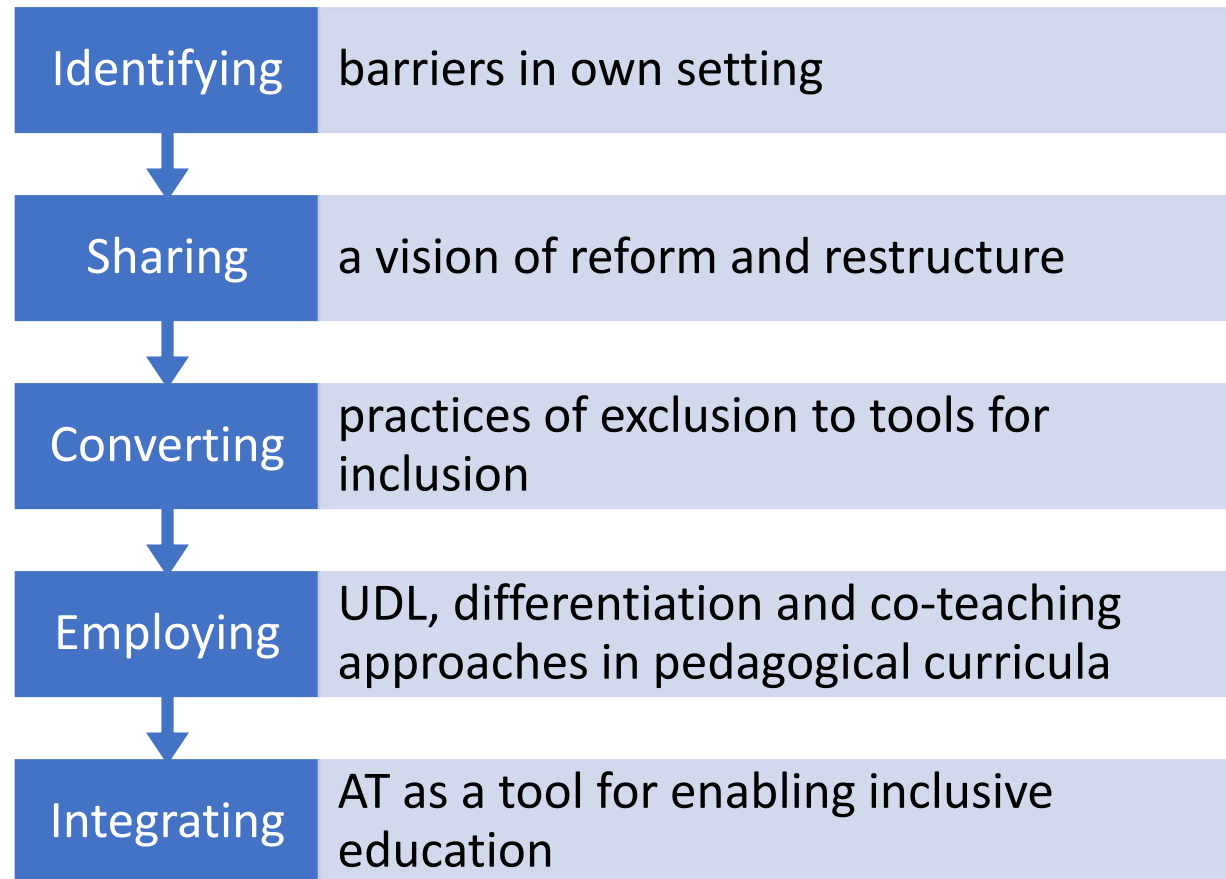


**What:** Teachers and school teams assess the needs and barriers to equal access and participation in the learning process for all learners

**How?** By understanding

- how educational practices may reflect **the various models and constructions of disability and diversity,**
- How educational practices may constitute **inclusion or exclusion pedagogies**
- that inclusive education **is for all children**

**How?** Acting by

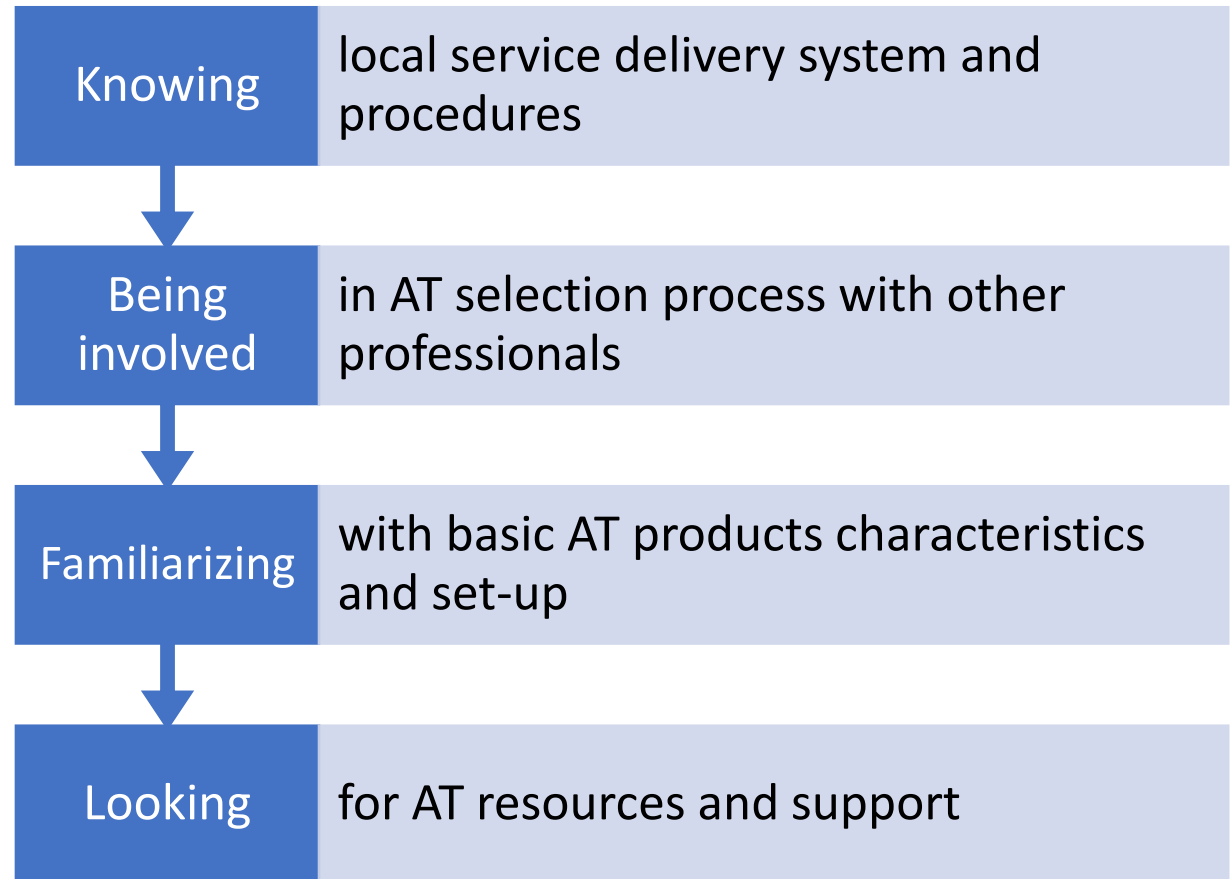


**What:** Teachers and school teams participate in the process of choosing and implementing appropriate AT

**How?** By understanding

- the assistive technology **ecosystem**
- **the impact** of global and regional initiatives to national policies
- **the main products and tools** of assistive and accessible technology

**How?** Acting by



# Teacher's role

**S**tudent: specifically related to the student

**E**nvironment: related to anything and or anyone around the student in places where technology is expected to be used

**T**asks: about what actually happens in the environments

source of information

collaborate

co-decide

plan, apply, evaluate

**T**ools: AT and relevant approaches to participate in

**T**asks happening in all school

**E**nvironments in order to include all

**S**tudents

**T**ools: what needs to be included when developing a system of AT support for the *student*, to do these *tasks* in those *environments*

**Follow-up & re-evaluate**



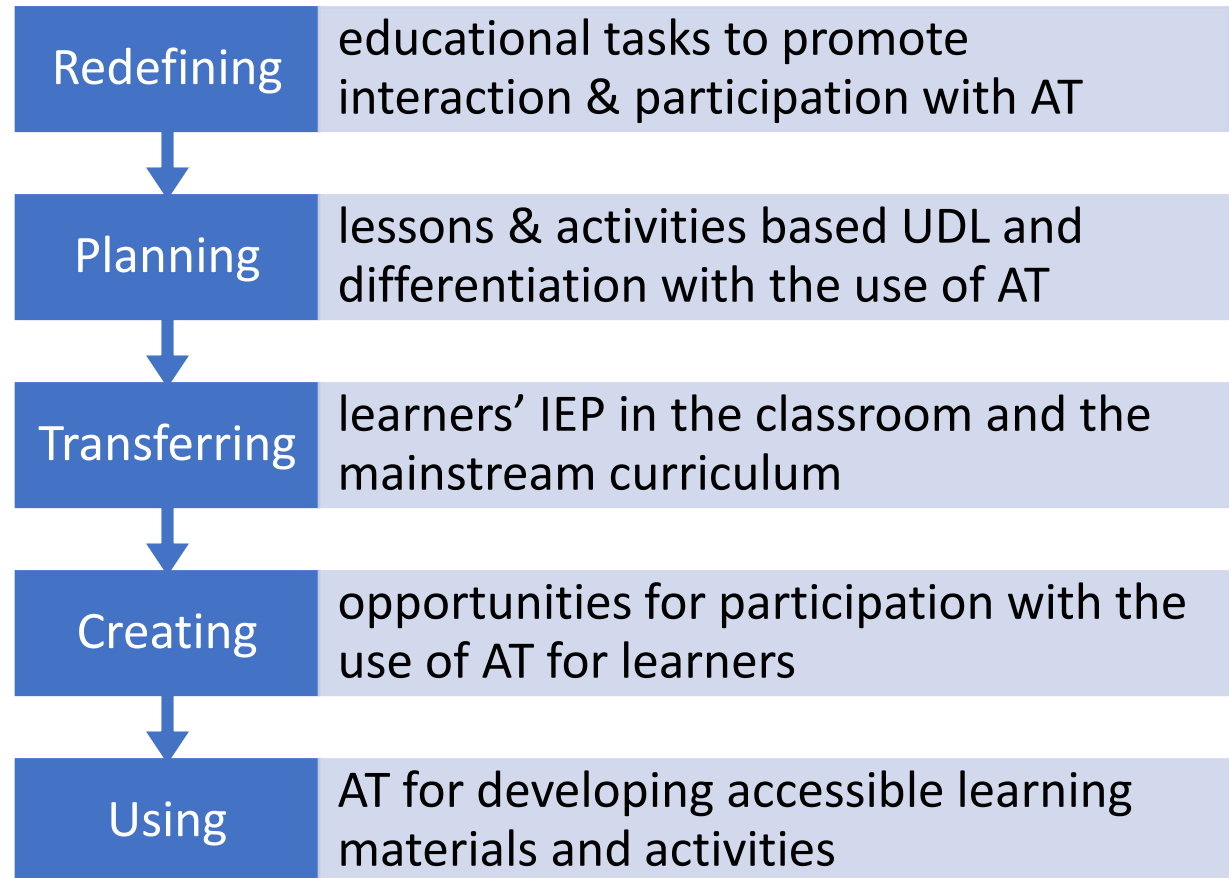


**What:** Teachers and school teams design and develop inclusive learning processes where AT has an added value for inclusion and participation

**How?** By understanding

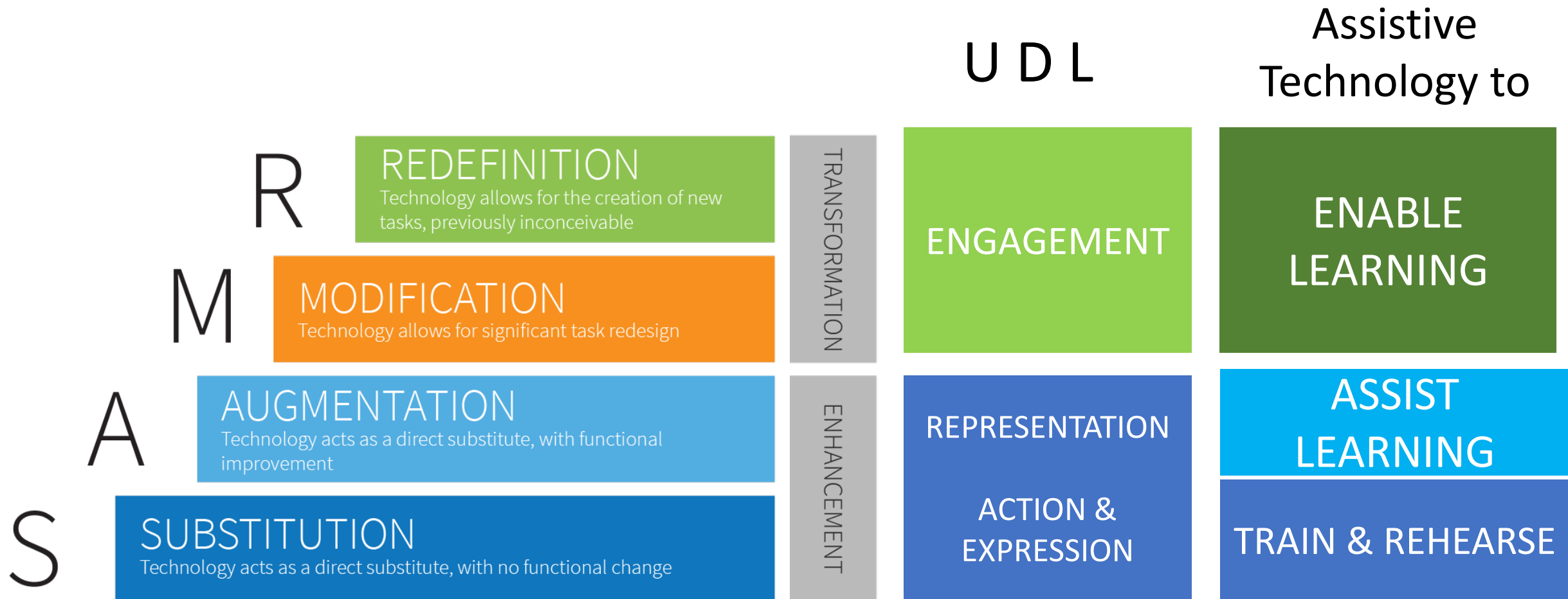
- how principles of inclusive pedagogies are implemented in **the design of learning processes** and activities
- the **role of assistive and accessible technology to learners' participation, collaboration, interaction and engagement.**

**How?** Acting by



# Methodological framework for designing learning by combining SAMR, UDL & AT taxonomy

(Mavrou et al, 2019)

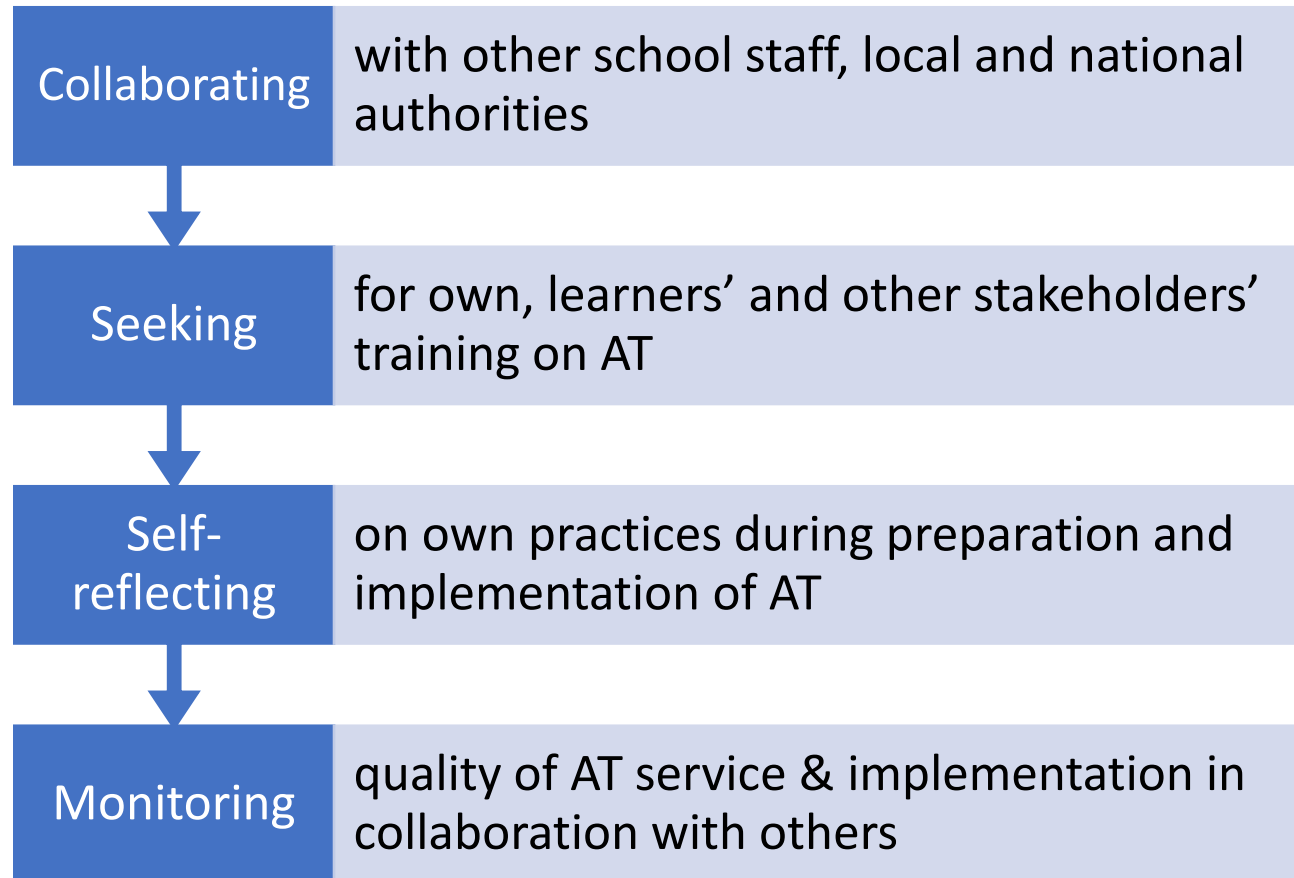


**What:** Teachers and school teams work collaboratively in a whole school approach

**How?** By understanding

- assistive technology implementation as part of a more **comprehensive planning**
- the **connections between** the *classroom* practice, the *school* and *local community* policies and culture, and the *broader assistive technology service* in education

**How?** Acting by



# Whole school approach and system level implementation



# Final structure and content of the Guide

## Section 1

### Contextualization – Inclusive Education

- Covering Assumption 1
- Inclusive Education: Identifying challenges and responses to inclusive and digital inclusive education

## Section 2

### Contextualization – AT ecosystem and technical aspects

- Covering Assumption 2
- Assistive Technology: Identifying, selecting and using assistive technology

## Section 3

### Guidelines for designing learning processes and activities with AT

- Covering Assumption 3
- Learning Design, Differentiation and UDL: Designing inclusive learning processes and activities with the use of technology

## Section 4

### Guidelines for a developing a broader implementation plan

- Covering Assumption 4
- Whole school approach and system level implementation



# Acknowledgments and Contacts

**MITIGATING THE IMPACT OF COVID-19  
ON CHILDREN AND FAMILIES**  
**IN THE WESTERN BALKANS AND TURKEY**



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Access to the full guide:





**The use of Assistive Technology  
in Education: A Guide for  
Teachers and Schools**

