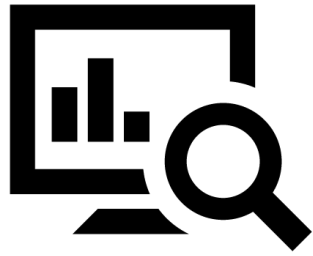


# Digital Inclusive Education: The role of learning design

Katerina Mavrou

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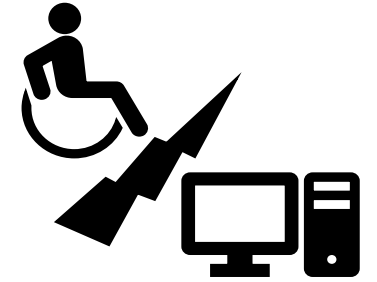
Technology: R & D



Educational services and programmes



Quality standards



Digital Divide



Learner-Centered Design



Human Rights



Digital Inclusive Education



Ethics and Safety





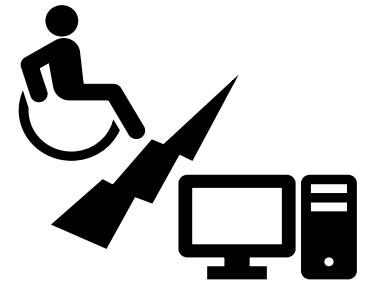
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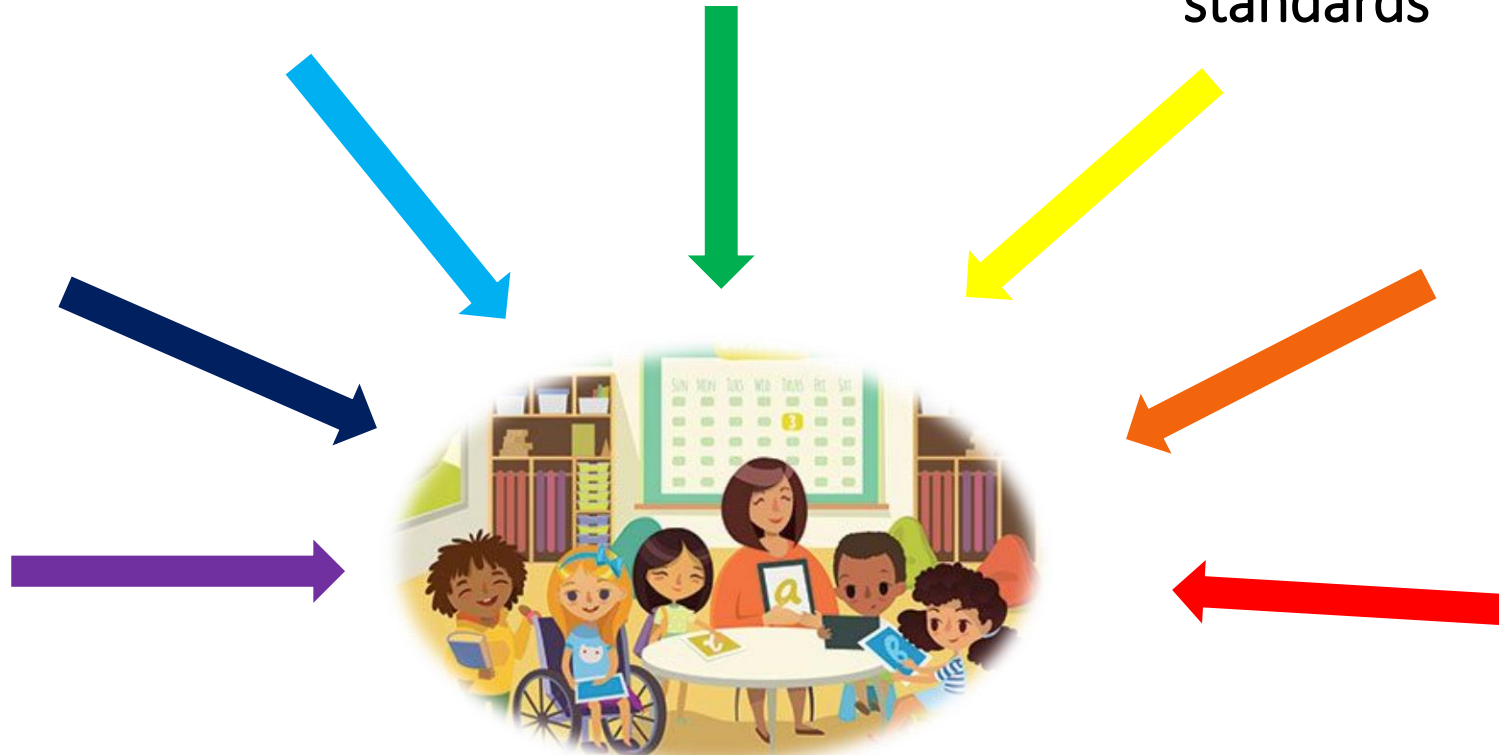
Digital Divide



Learner-Centered Design



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Digital Inclusive Education



Ethics and Safety

# Digital Education





# Inclusive Education

## UN CRPD (2006):

- **Article 2: Definitions**

«*universal design*» ... products, environments, programmes and services...

Does not exclude the use of assistive devices...

- **Article 9: Accessibility**

...to live independently and fully participate in all aspects of life.

... equal access in physical environments... information and communication, including technology and ICT...

- **Article 24: Education**

... are not excluded from the general education system on the basis of disability...reasonable accommodation of the individual's requirements is provided...effective individualized support measures



# Digital Education: Paradigm Shift

## Digital Reform and Transformation:

### Variety of schemes

- Hybrid / Blended learning models
- Digital enhanced learning
- E-Learning
- Online Learning
- Distance Learning

---

**Learning design:** learner-centred and learning communities-based

---

**Technology:** potential and added value of technology and the internet

---

**Interaction:** participation and engagement





# Inclusive Education: Paradigm Shift

## Educational Reform and Transformation of:

- Pedagogies
- Educational Curricula
- Physical and digital learning environments
- Learning materials and tools
- Learning strategies and activities

---

**Learning design:** universal design for learning

---

**Technology:** accessibility and digital inclusion

---

**Interaction:** differentiation, equal opportunities for participation and engagement

A decorative graphic consisting of four parallel white diagonal lines on a black background.





# Digital Inclusive Education



# Digital Inclusive Education: Paradigm shift

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learner-centred and learning communities' based

---

potential of technology and the internet

---

participation and engagement

---

Design



Technology



Participation

---

universal design for learning

---

accessibility and digital inclusion

---

differentiation, equal opportunities for participation and engagement

---





# Digital Inclusive Education: additional issues

Design



Technology



Participation

---

**Environment:** physical and digital

**Approaches:** Inclusive Pedagogies  
(objectives, activities, assessment)

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**(Assistive) Technology:** Available,  
accessible

**ICT-AT literacy:** (digital) competencies

---

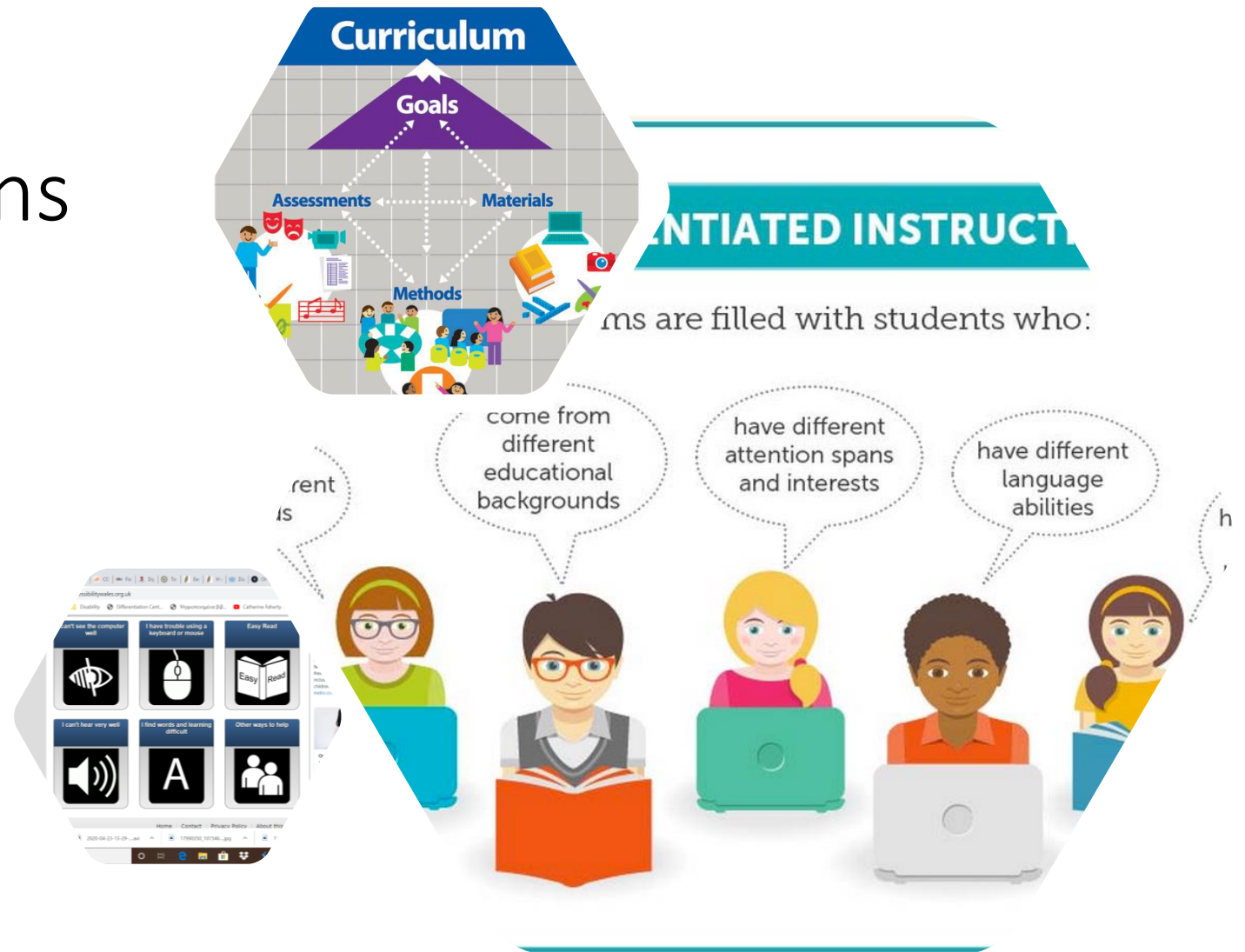
**Roles:** collaboration and participation

**Culture:** justice, equality, safety

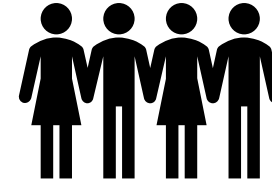
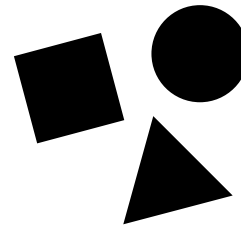
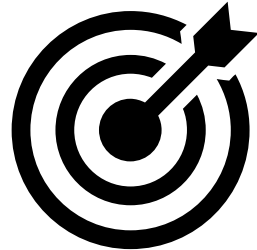
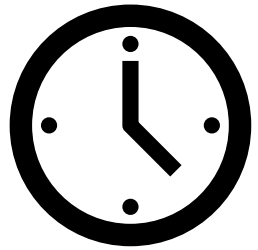


# Learning Design: Preparation concerns

- Identify barriers in opportunities for participation in the classroom
- Identify barriers in access and technology in the classroom
- Assess existing needs, knowledge and competencies
- Identify resources (human and artefacts)



# Learning Design and Assistive Technology: Planning concerns



**Set a time-  
schedule**

**Define  
the  
setting**

**Set  
objectives**

**Decide  
on  
activities**

**Identify  
persons  
involved**

**Provide  
for  
training**

# Learning Design: Learning process concerns

- Set objectives
- Design activities
- Define roles
- Integrate technology



## **Process**

Co-Design, Collaboration & Communication

Flexibility & Differentiation

Learning Platform & delivery mode

Assessment



## **Meetings & Interaction**

Assistive technology

Accessibility

Sound

Image

Text

Video



## **Content and material**

Accessible Documents

Accessible Resources

Accessible Tools

Assistive Technology

# Example: Preparation of Learning Design in Practice

Principles of UDL	Learning Design and Activities	Means, Tools, Technology
Provide options for <b>Engagement</b>	<ul style="list-style-type: none"><li>• Learning Platform/environment</li><li>• Meaningful activities (links to current issues)</li><li>• Relevant to digital (AT) competencies</li><li>• Compulsory and optional activities options</li><li>• Alternative assessment opportunities</li></ul>	<ul style="list-style-type: none"><li>• Learning Platform/environment</li><li>• Accessible study guides/alternative modes</li><li>• Hyperlinks and bridges</li><li>• Accessible Interactive content</li></ul>
Provide options for <b>Representation</b>	<ul style="list-style-type: none"><li>• Physical accessibility</li><li>• Alternative means of presenting information and content</li></ul>	<ul style="list-style-type: none"><li>• Subtitles</li><li>• Available Assistive Technology</li><li>• Digital editable and accessible content</li><li>• Easy-to-read</li></ul>
Provide options for <b>Action and Expression</b>	<ul style="list-style-type: none"><li>• Synchronous and Asynchronous Learning</li><li>• Differentiation in Assessment</li><li>• Staged and leveled activities and assessment</li></ul>	<ul style="list-style-type: none"><li>• Interactive content/video/material</li><li>• Multiple means for communication and interaction (e.g. IM, email, chat, AAC)</li></ul>