



# Mainstreaming innovation and digital skills in education

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# 1. Concepts

- Innovation
- Digital skills
- Education

# 2. Challenges

- schools, teachers and curriculum management
- educational policies

# 1. Concepts

- Innovation
- Digital skills
- Education

**Education** “includes the development of skills, values, attitudes and knowledge that enable citizens to lead healthy and fulfilled lives, make informed decisions and respond to local and global challenges” (UNESCO, 2015)

# Culture of **innovation** in education

- At school level
- At educational system level

Global  
competency  
for an inclusive  
world



## OECD Future of Education and Skills: Education 2030

*Skills to shape the future:*

*It is about acting rather than to be acted upon, shaping rather than to be shaped and choosing rather than to accept choices decided by others.*

**According to the OECD Innovation Strategy for Education and Training, the innovative capacity of technology is very much conditioned by the level of digital skills of the population. (OECD, 2016)**

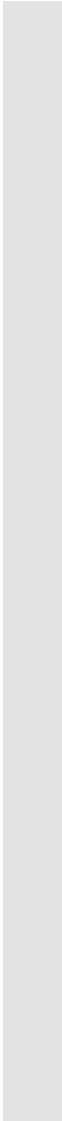
The “innovation imperative in education” and “the power of digital skills and technologies in education” mean that digital technologies have the huge potential to transform education strategies and practices and open up new horizons, but cannot transform education by themselves (OECD, 2016)





We need digital technology to empower the teaching and learning environments.

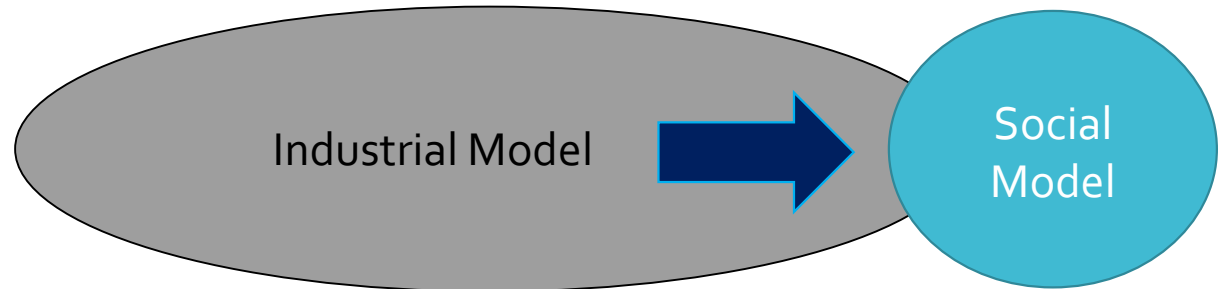
Education and training systems must empower people to socialize, communicate, work, think time and space differently.



**But...**

**Industrial model** (segmented subjects, standardized, based on knowledge transfer, on authority, on hierarchy, dependency, curriculum overload, ...)

**Social Model** (based on multidisciplinary, differentiating, knowledge construction, collaboration, autonomy, interdependence, quality, ...)



## 2. Challenges

- schools, teachers and curriculum management
- educational policies

**The inertia of the system tends to attenuate the innovations.**

- Many studies have argued for **more flexible, open forms of learning and of school organisation.**
- But still a **variety of factors is holding back fundamental change** in traditional practices (also been studied).

In short, the message is that too many schools still tend to have only rudimentary knowledge management practices, despite knowledge being education's explicit business.

- Schools have **weak networking and knowledge-sharing among teachers.**
- **Application of the R&D is quite limited in education**
- Most of the professional knowledge that teachers use in their daily work is **tacit**: it is rarely made explicit or shared with colleagues.
- Schools and classrooms are normally **isolated** one from another rather than interlinked.

# Reshaping schools for Digital Education

Schools challenges that educational systems are facing require strategic action in several domains:

- Purpose / schools core mission (new role for schools and teachers; students agency  
- involve students in decision making)
- Structure / organisation (time, learning environments)
- Curriculum (focus on creativity, critical thinking and other soft skills)
- Methodologies (changes in pedagogical and didactic practices => collaborative learning, project-based learning, interdisciplinarity, ...)

# Reshaping schools for Digital Education

The efficient use of digital technology in schools relies on including it in strategic planning and school culture.

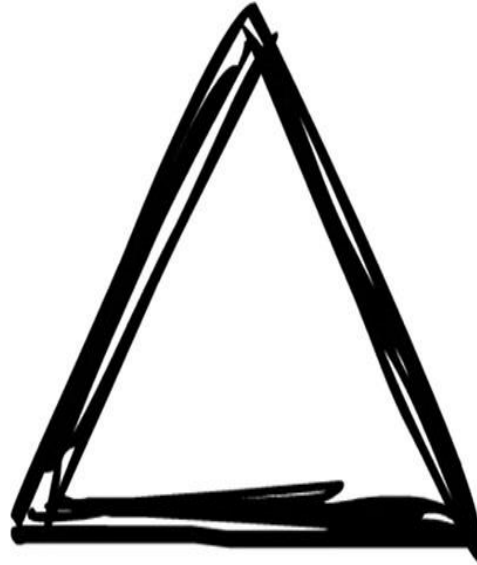
It implies teachers' proper education and training.

It implies proper integration in curricula methods, content and purposes.

It implies digital educational resources.

It implies a proper infrastructure and funds.

**Policy**

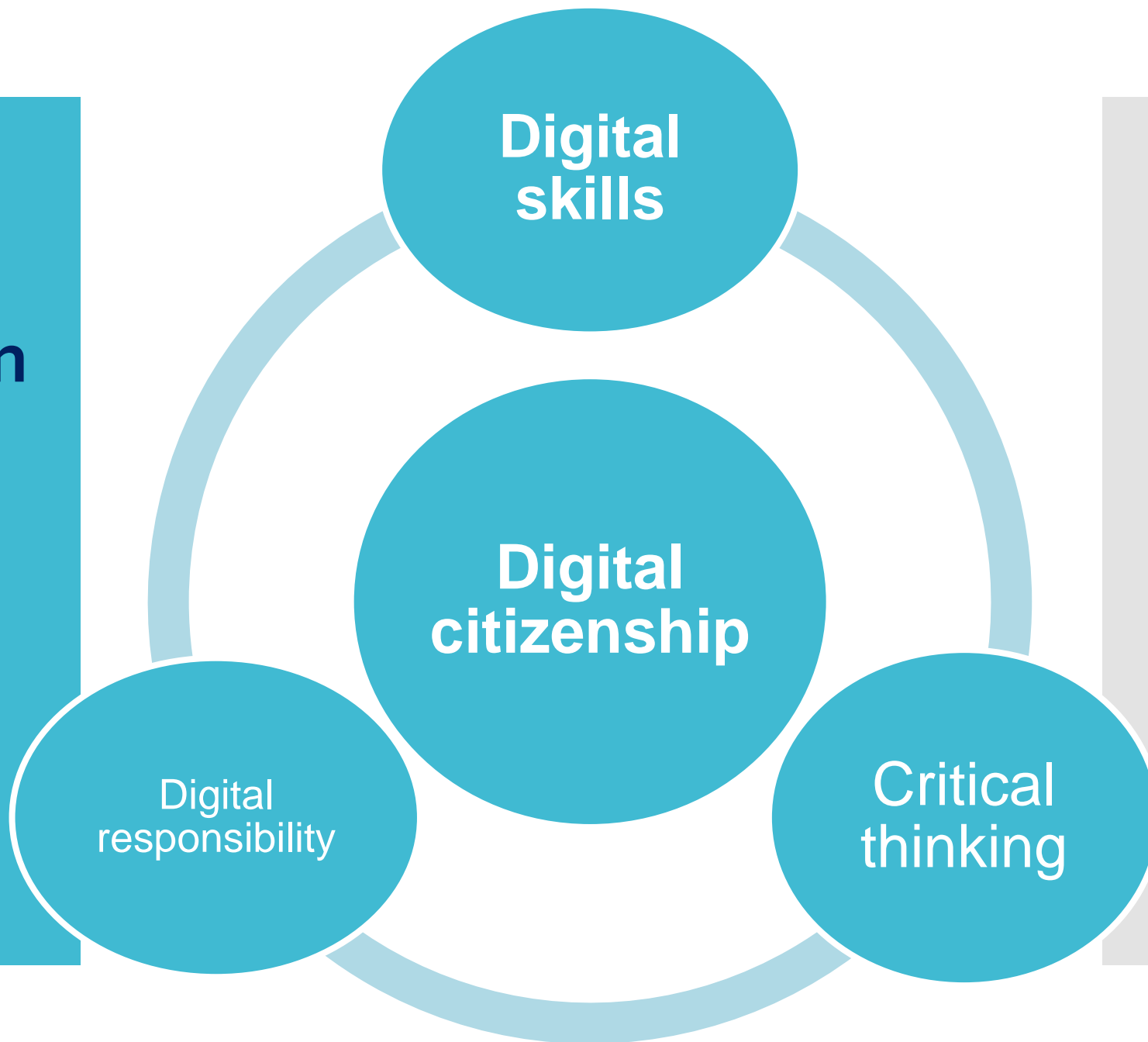


**Research**

**Practice**



# Digital Education



# Digital Education

- Technological infrastructure
- Curricular flexibility
- Curriculum integration and the extension of ICT in the curriculum
- Digital educational resources
- Teacher training
- Projects promoting innovative dynamics

# Thank you!

# Obrigada!

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