



# **Transformation of teaching and learning processes**

Some issues on innovation in school education

Athens – 16 January 2014

Marc Durando

# Presentation structure

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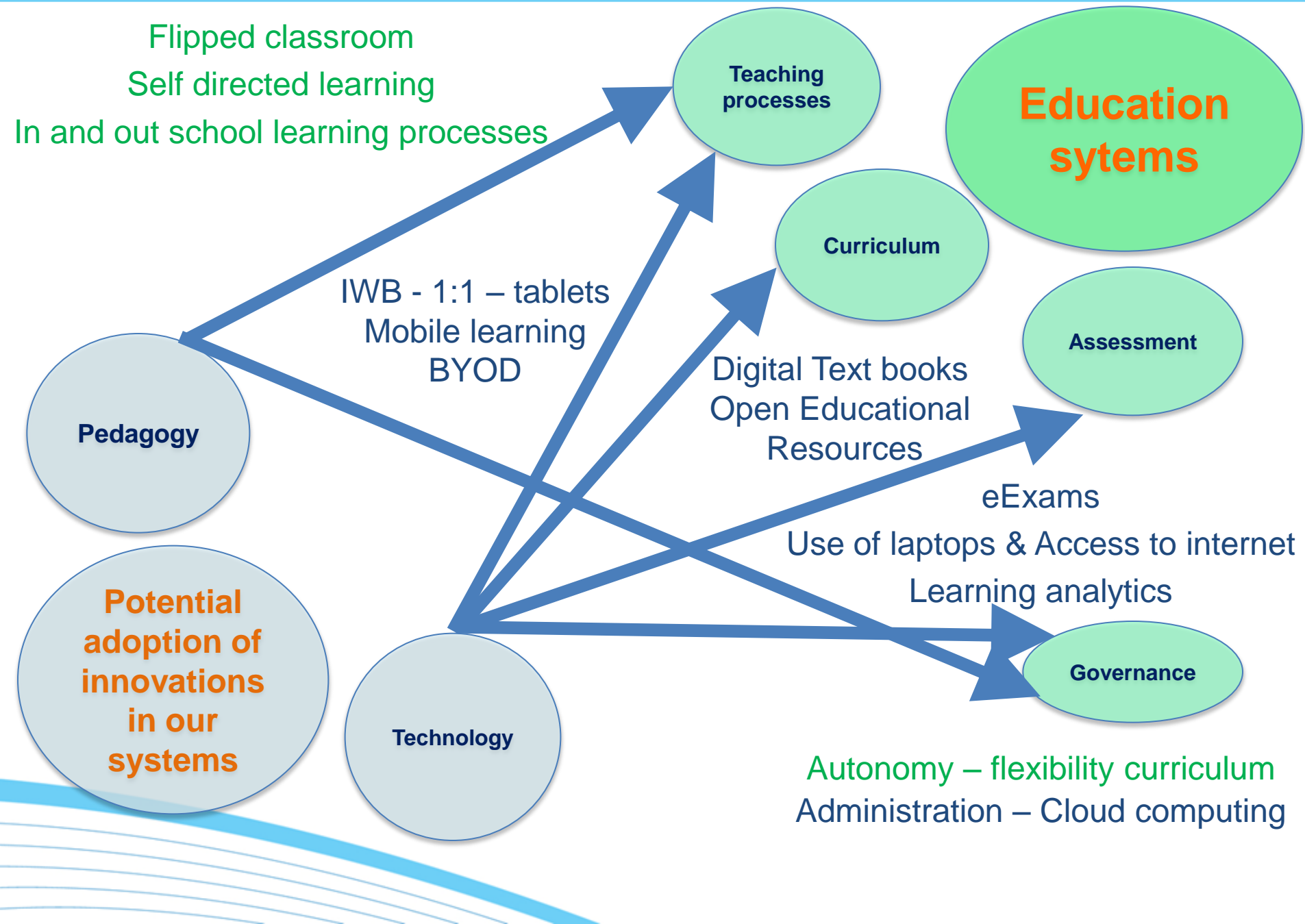
- How to define innovation in school education ?
- Is the school environment so favourable for innovation ? Does technology make a change?
- Main challenges of innovation in school education with a focus on the teacher of the 21st century

**How to define innovation in education ?**

# How to define innovation in Education

- An idea, practice, or object that is perceived as new by an individual or other unit of adoption [Rogers, 1995] – Innovation is contextual
- An innovation is a change that creates positive value and is better or more effective than its predecessor [ Kirkland and Such, 2009 ]
- **Significant educational innovation** – or change in practice – must contain three elements:
  - **Use of new revised materials** (curriculum materials or technologies)
  - **Use of new teaching approaches** (teaching strategies or activities)
  - **Alteration of beliefs** (pedagogical assumptions) [ Fullan, 2007 ]

# Innovation in school education – a complex process



**Is the school environment so  
favourable ?**

**Does technology make a change?**

# Is the school environment so favourable ?

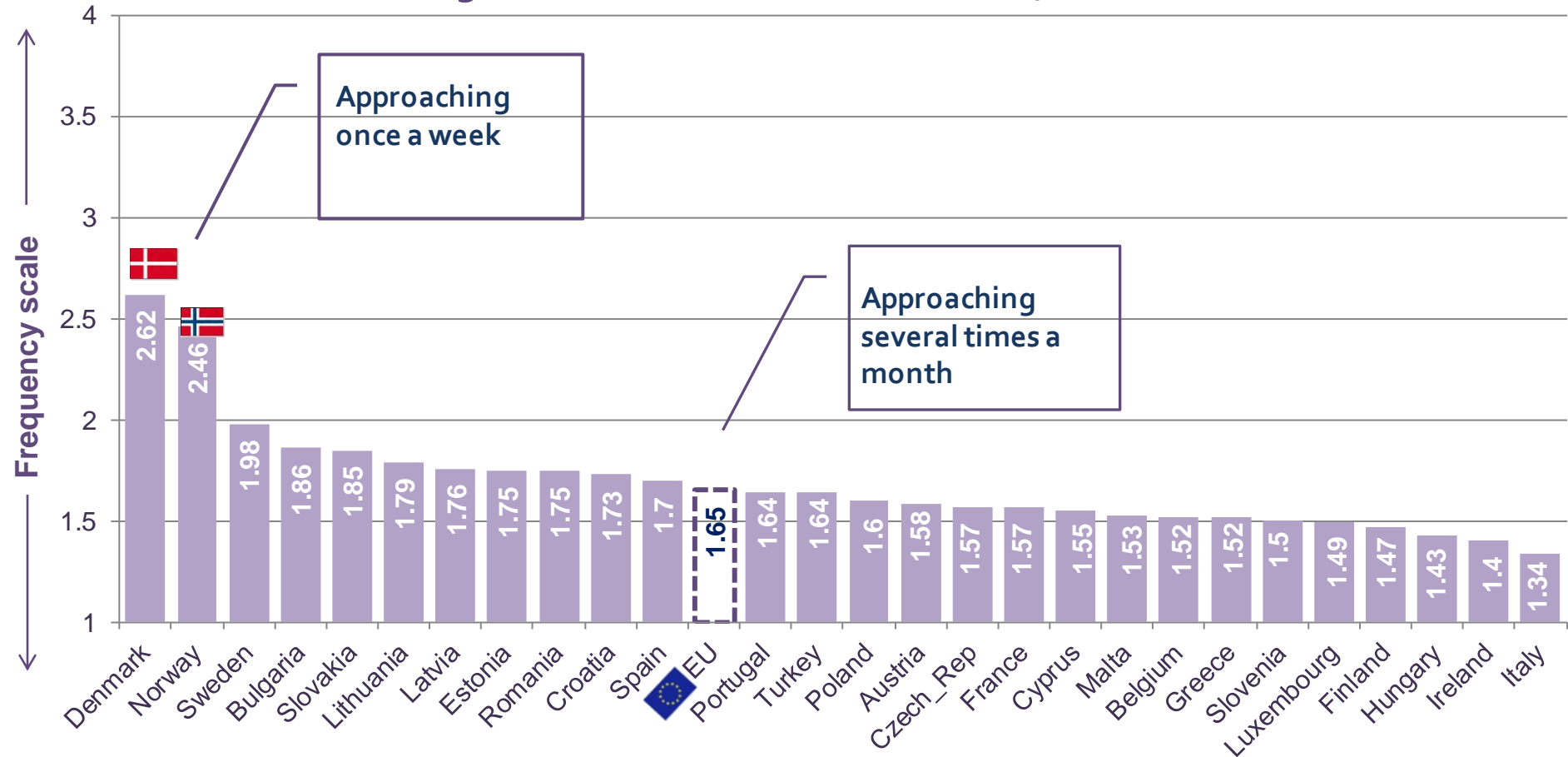
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School boredom has no chance against the addictive draw of the outside world

Within schools, technology is visible by its absence or by its superficial ad hoc use

# The Survey of Schools: ICT in education

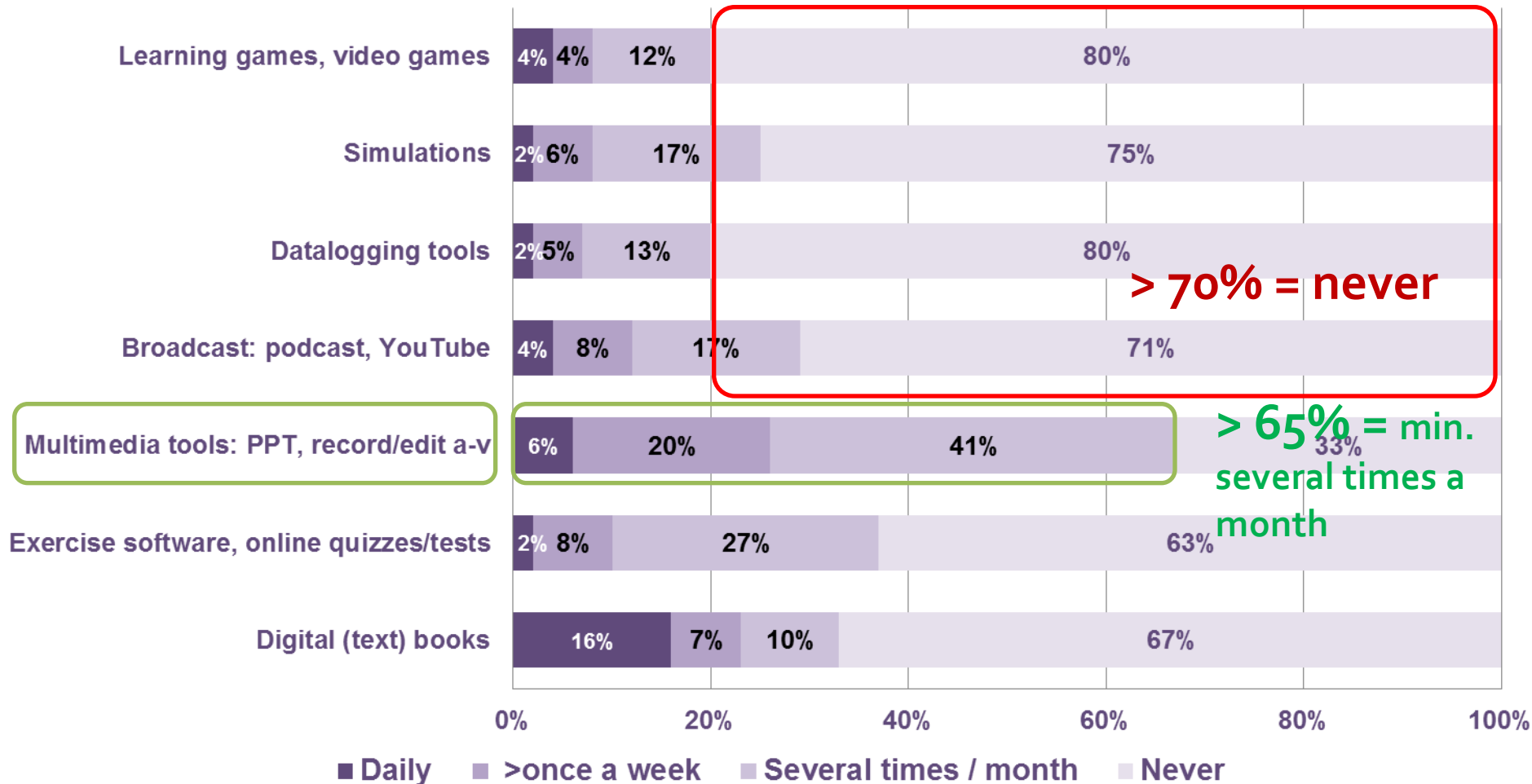
Student's ICT based activities frequency during lessons at grade 11  
in general education (mean scores; 2011-12)



Students' use of ICT during lessons  
not yet on a weekly basis



# Students' use of resources and tools during lessons at grade 11 general education (in % of students, EU level, 2011-12)



Some ICT learning tools and resources are never used during lessons by a large majority of students

# Is the school environment so favourable ?

School boredom has no chance against the addictive draw of the outside world

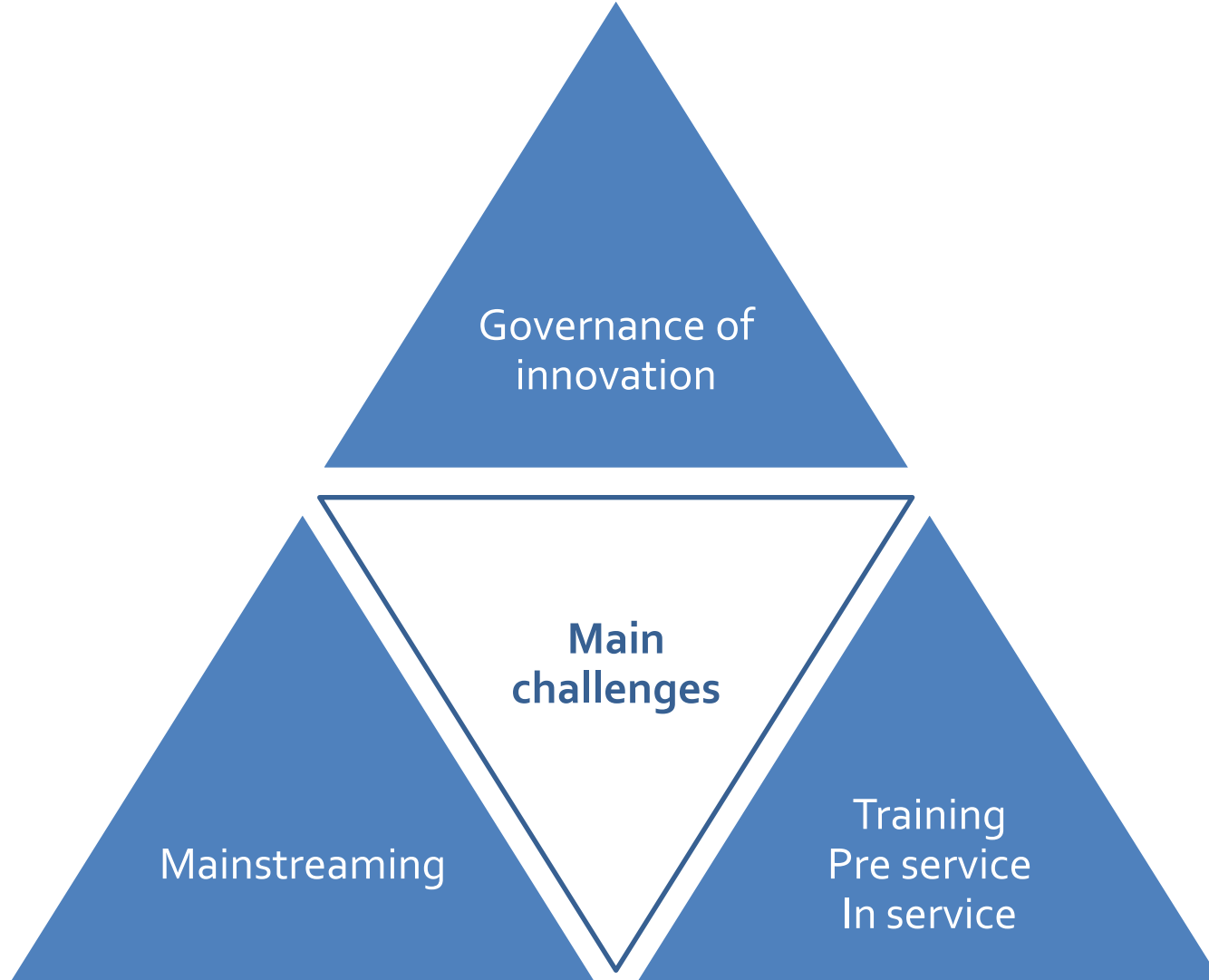
Within schools, technology is visible by its absence or by its superficial ad hoc use

How can technology help engaged learning ?

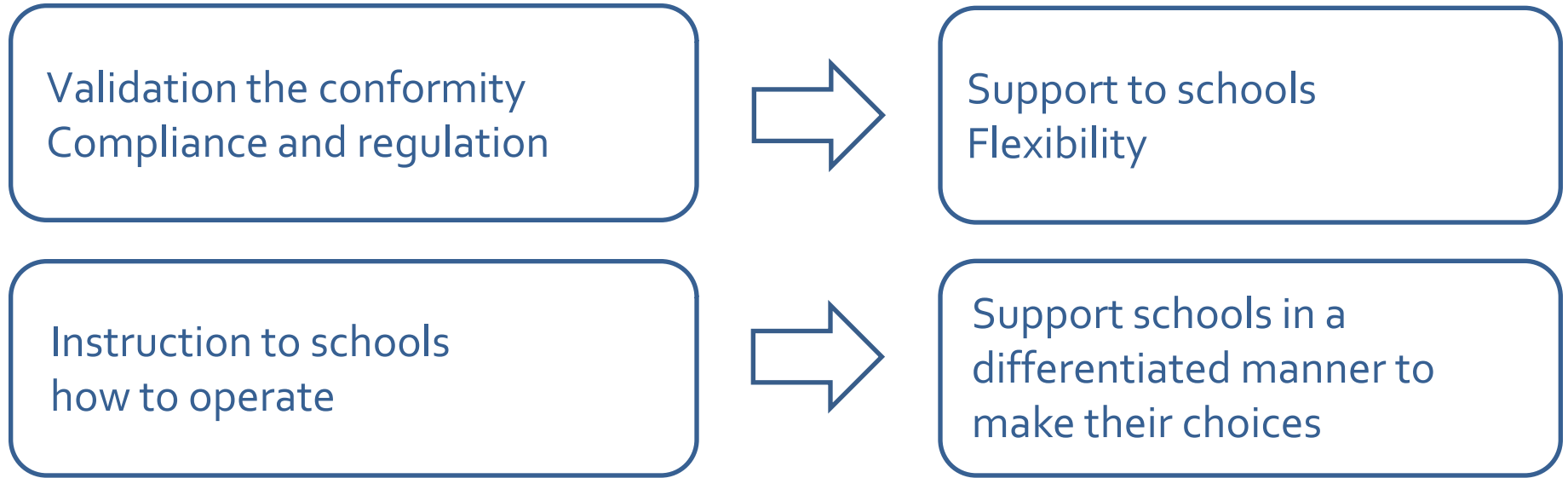
# **Main challenges of innovation in school education**

**Focus on the teacher of the 21st  
century**

# Main challenges of Innovation in Education



# Governance of innovation - New role of the central level



Take the measure of the necessary change  
At **all levels** of the **governance process**

**Challenge of responsibility** (accountability)  
and of **assessment**

# Teacher training for the 21st century

## A quantitative challenge

3.000.000+  
missing teachers  
(UNESCO)

Also a challenge  
at EU level

60% of teachers  
above 40 years-  
old

## A qualitative challenge

« Efficient  
professionals»

New training  
models better  
preparing for  
practice



What is an efficient teacher in the 21<sup>st</sup> century?

A professional with a high judgment capacity in  
situation

**Teaching today is about being a  
reflective professional teacher**

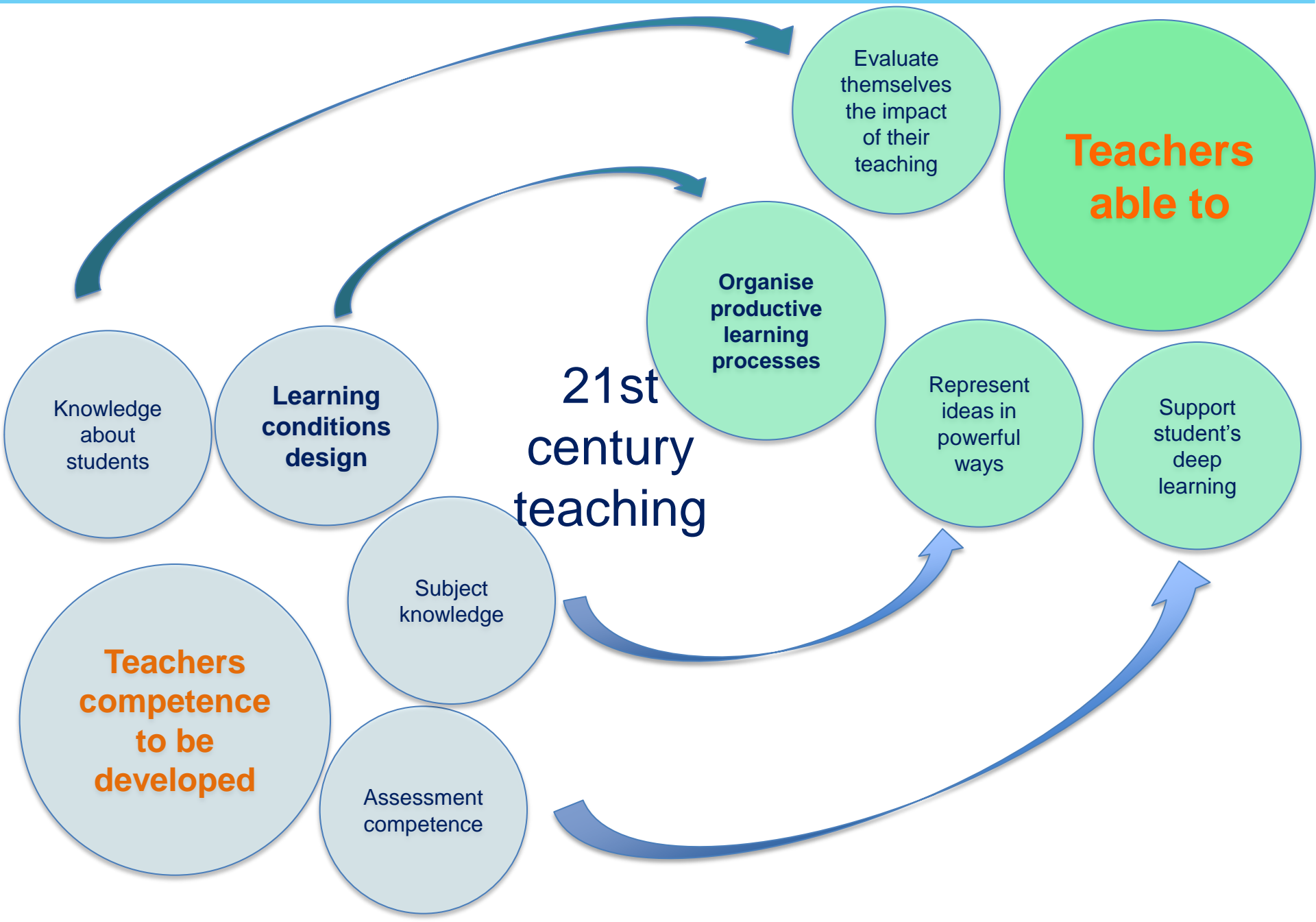
(Donald Schön)

The professional teacher  
as one who learns from teaching  
rather than  
one who has finished learning how to teach

Linda Darling-Hammond,

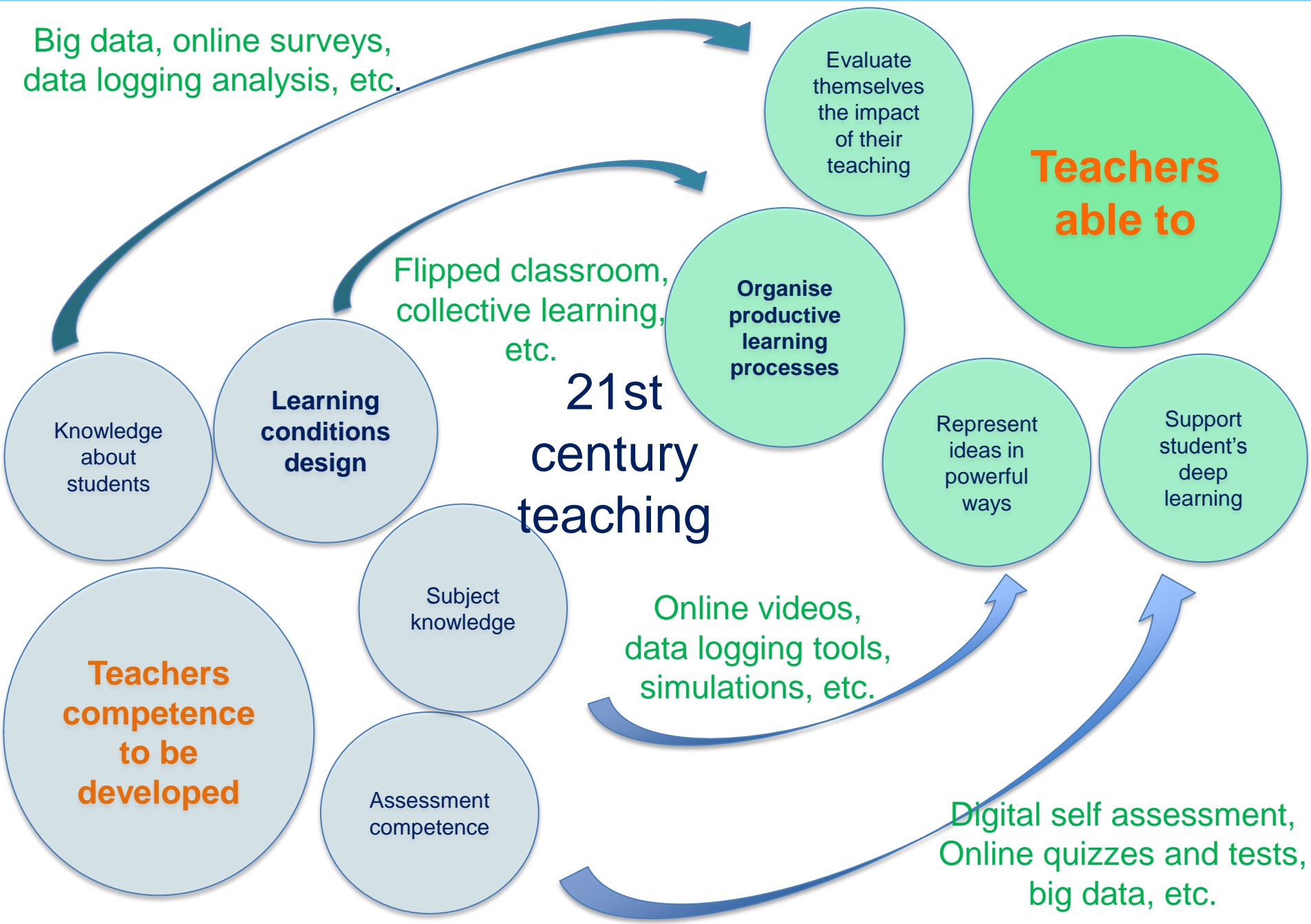
Stanford Graduate School of Education

# How to train a teacher to be an efficient professional?





# How to use technology to get there?



# 3 key areas for teacher professional development

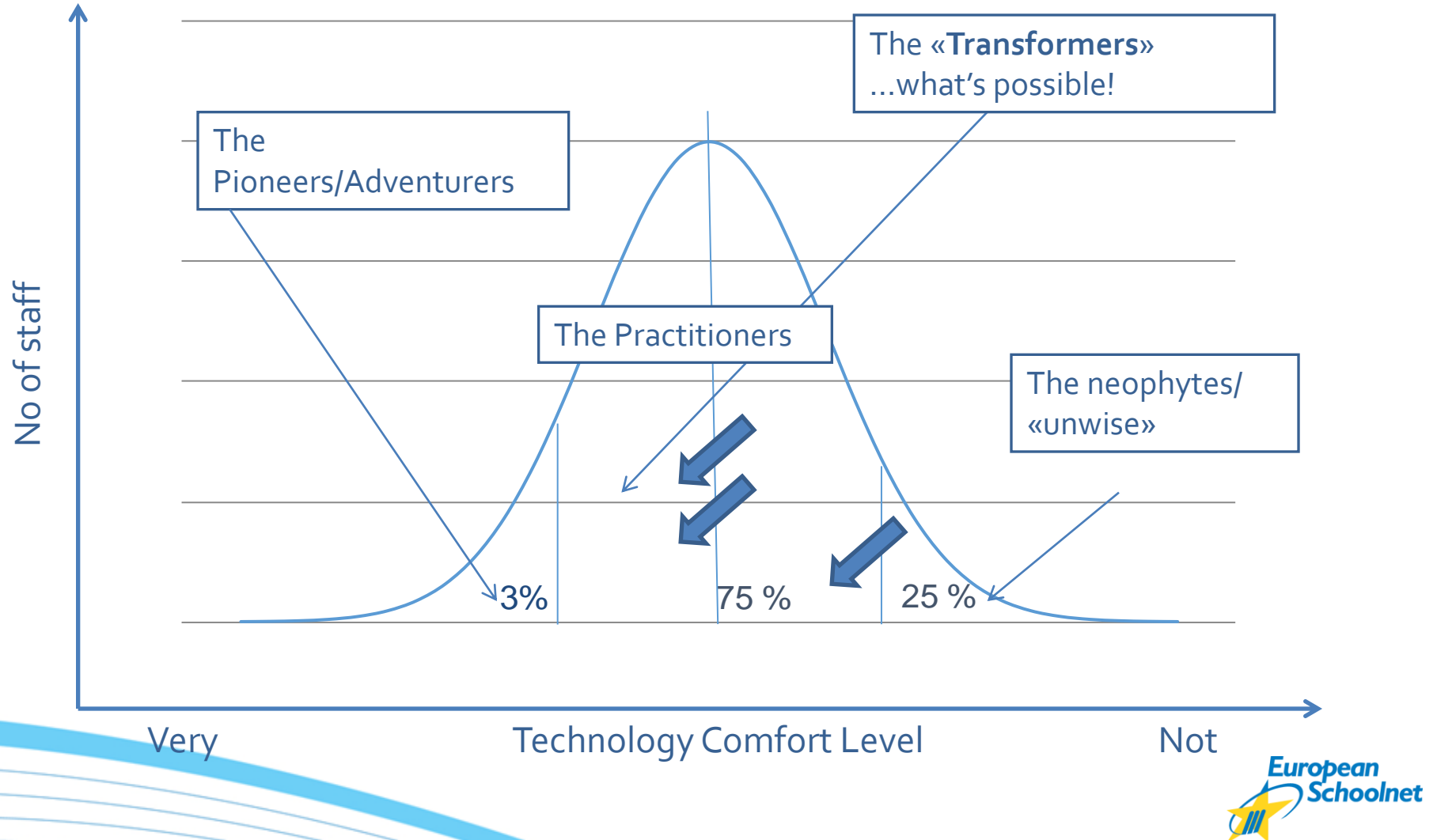
1. creative approaches to teaching and learning
2. teaching and learning with digital technologies
3. personalising student assessment.

**If a 5% annual increase in the education budget were targeted on professional development in these areas, it could have a huge impact on the quality of teaching, learning and achievement in all schools.**

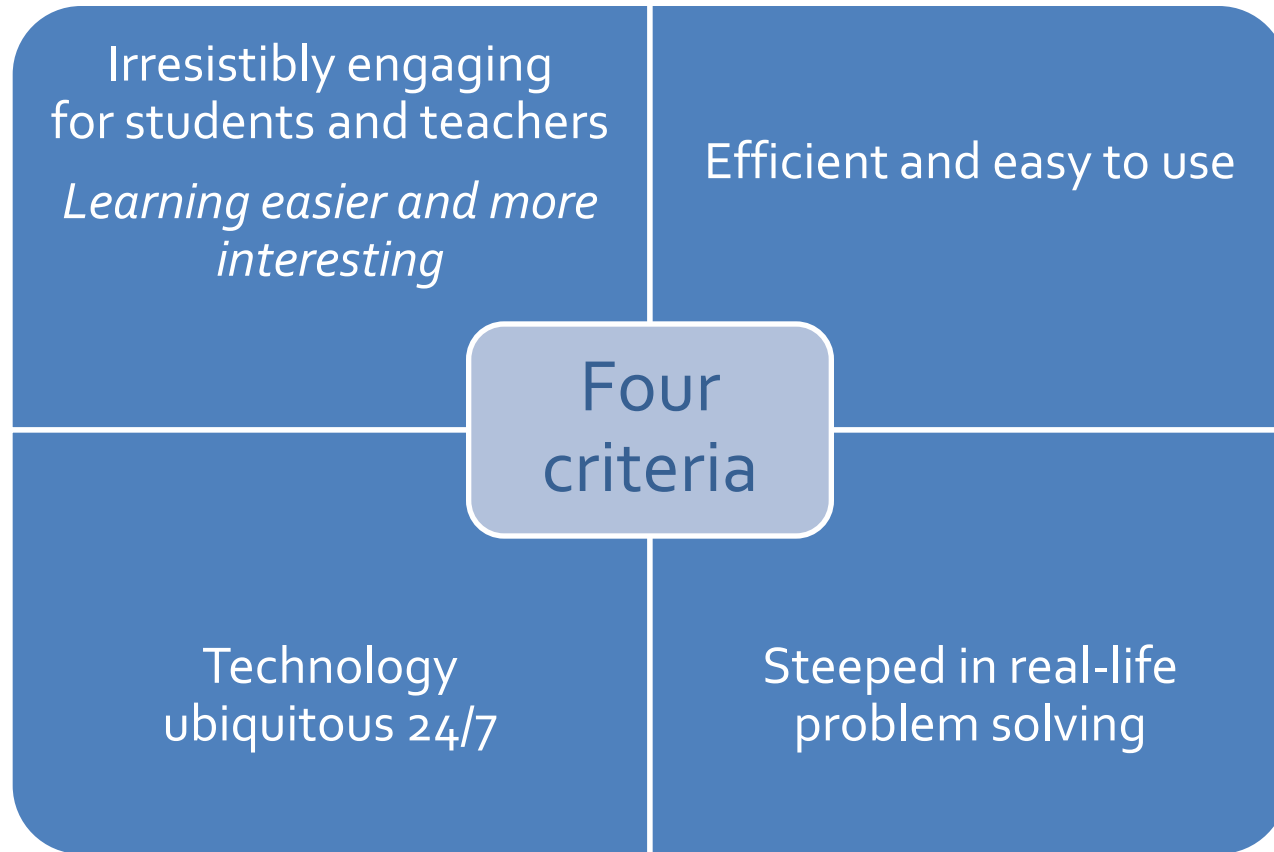
**Sir Ken Robinson (November 2013)**

# Mainstreaming issue

From a few to many ... getting everyone involved

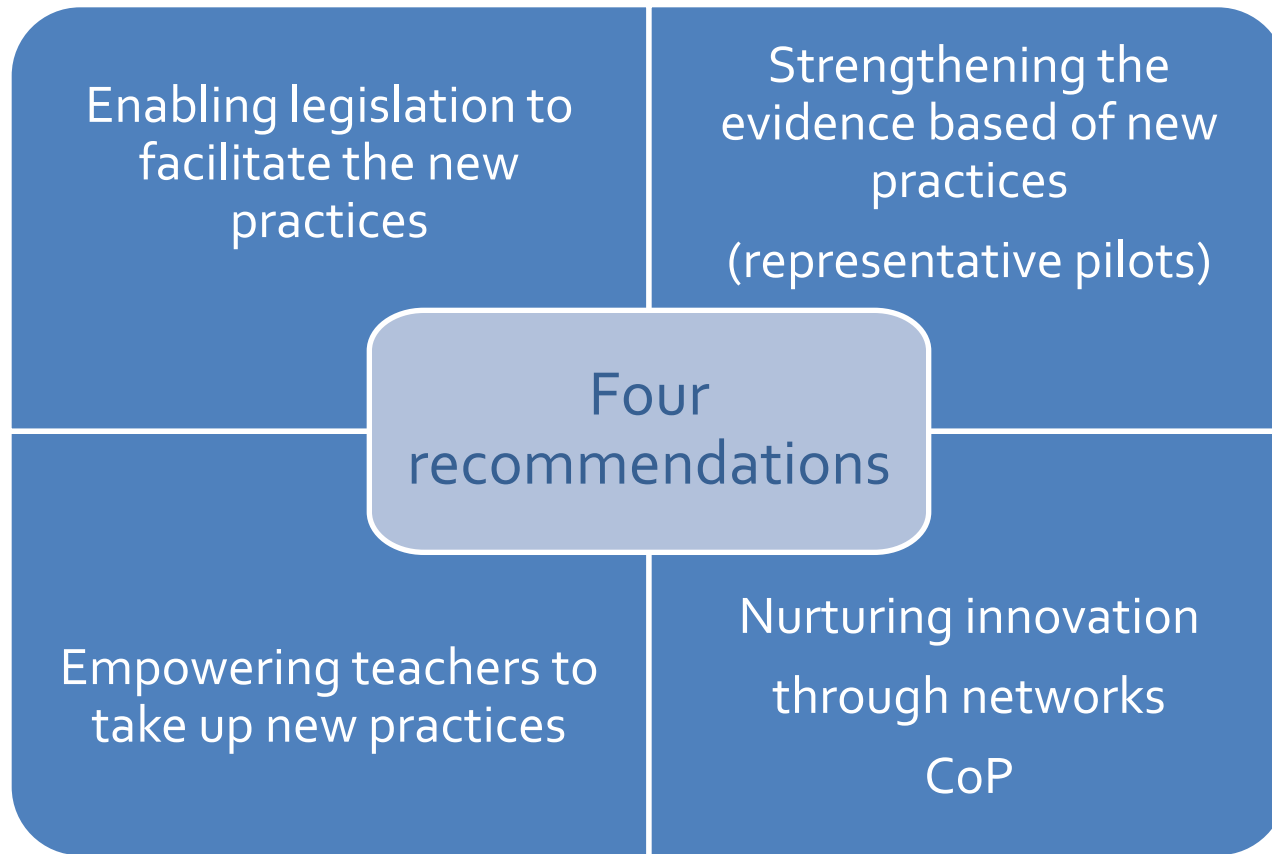


# Integrating technology and pedagogy in teaching and learning processes



Don't focus on technology – focus on its **purposeful** use  
Interrogate every new technology for its potential to  
serve educational aims

# Recommendations - mainstreaming approach



Balance between top down and bottom up approaches

# The 3 critical success factors

## Make it known

- Evidence demonstrating it can happen – practices videos

## Recognition & Time

- Giving recognition and time to teachers

## Political decision

- No way backwards possible

# Conclusion

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- **The future classroom**  
more a pedagogical challenge than technological
- **Complex issue**  
obstacles to overcome technical integration but more importantly in terms of processes
- **Cooperation and comparison between countries**  
indispensable laboratory of practices and analysis
- **Research (and evaluation)**  
even more necessary to support and guide a major evolution of our education systems

# Thank you

[www.europeanschoolnet.org](http://www.europeanschoolnet.org) / [www.eun.org](http://www.eun.org)

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