CREATING INNOVATIVE LEARNING ENVIRONMENTS TO IMPROVE LEARNING

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Education at OECD and CERI

- **OECD**: inter-governmental, multi-sectoral organisation. Focused on education since the early 1960s (early days - planning, equity, economics of education, science)

- **CERI** founded in 1968, aims to inform long-term policy development
  - generating forward-looking research analyses and syntheses;
  - identifying and stimulating educational innovation;
  - promoting international exchange of knowledge and experience

- **Schooling for Tomorrow** (finished 2008), **Innovative Learning Environments** (on-going)
WHY LEARNING? WHY INNOVATION? WHY LEARNING ENVIRONMENTS?
Why learning?

- **Knowledge central** to our societies - therefore, learning also central. But what kind of learning?

- Strong focus on measuring learning outcomes but **how to change outcomes?** Needs focus on learning environments

- The difficulties of **changing education** invites a fresh focus on learning itself
Why innovation?

Systems and existing models are not performing well enough - on PISA, nearly 20% of 15-year-olds failed to reach level 2 in reading in 2009 across OECD.

Even more, if we aim to promote deep learning, 21\textsuperscript{st} century competences, foundations for lifelong learning, vibrant culture.

The evidence-based principles of learning we have identified themselves call for a significant innovation drive.
Why learning environments?

- Learning is cumulative and contextualised – from the learner’s perspective, need to consider the **whole collective learning experience**
- **Technology** invites rethinking of learning and teaching possibilities – in general the potential still not being fully realised
- **Not necessarily school**, but a wide range of settings and forms of learning
COMMON FRAMEWORK IMPLICIT IN MUCH RESEARCH AND DISCUSSION OF SCHOOLING AND LEARNING

- SYSTEM
  - SCHOOL
    - CLASS
      - TEACHER
        - LEARNER
Why look beyond this framework when our focus is on learning?

Expressed in terms of institutional structures, not configurations of learning – **not sufficiently learning-focused**

Assumes existing institutions, discouraging consideration of innovations, hybrid or non-formal learning – **not innovation-focused**

**Single schools, single classes, single teachers** suggesting individualistic solutions – **not holistic enough**
ILE AND THE ‘PRINCIPLES’ OF LEARNING
OECD/CERI’s “Innovative Learning Environments” (ILE)

Aims to inform practice, leadership and reform through analysis & exchange on configurations of learning for young people, by:

1. Understanding the lessons of “Learning Research”
2. Compiling & analysing inspiring “Innovative Cases”
3. Analysing and exchanging strategies for growing and sustaining innovative learning - “Implementation and Change”

To date, around 125 cases, 40 in-depth case studies, 25 countries, states & organisations (and growing).
"The Nature of Learning: Using Research to Inspire Practice" - Contents

1. Analysing & Designing Learning Environments for the 21st Century
2. Historical Developments in the Understanding of Learning
3. The Cognitive Perspective on Learning
4. The Crucial Role of Emotions & Motivation in Learning
5. Developmental & Biological Bases of Learning
6. Formative Assessment

7. Technology and Learning
8. Cooperative Learning & Group-work
9. Inquiry-based Learning
10. The Community and Academic Service Learning
11. The Effects of Family on Learning
12. Implementing Innovation: from visions to everyday practice
13. Future Directions
Powerful learning environments should:

- Make learning central, encourage engagement, and be where learners come to understand themselves as learners.
- Ensure that learning is social and often collaborative.
- Be highly attuned to learners’ motivations and the importance of emotions.
- Be acutely sensitive to individual differences including in prior knowledge.
- Be demanding for each learner but without excessive overload.
- Use assessments consistent with its aims, with strong emphasis on formative feedback.
- Promote horizontal connectedness across activities and subjects, in-and out-of-school.

Do all of these, not one or two – demanding agenda.
Learning environments should be:

- **Learner-centred**: highly focused on learning but not as an alternative to the key role for teachers
- **Structured and well-designed**: needs careful design and high professionalism alongside inquiry & autonomous learning
- **Profoundly personalised**: acutely sensitive to individual and group differences and offering tailored feedback
- **Inclusive**: such sensitivity to individual and group differences means they are fundamentally inclusive
- **Social**: learning is effective in group settings, when learners collaborate, and when there is a connection to community.
Dynamic ‘Formative’ Learning Environments

Powerful LEs apply the 7 principles

- Innovate by rethinking core components and processes

- Constantly generate & use information about learning formatively through active ‘learning leadership’

Information-rich about learning activities, learners, and outcomes – evaluation and self-evaluation

Learning leadership

Learning activities & pedagogical mixes

resources

content

‘teachers’

learners

LEARNING

Learning Feedback
Learning environments embedded in a wider systemic framework

‘Atomic’ level –
individual classes &
learning episodes

Micro level
Environments –
learning &
institutional

Meso level Networks
of environments &
of practice

Macro level -System & ed.
authorities
To sum up…..

Rethink learning and be ready to innovate

Draw on research and practice to create & sustain powerful learning environments (the ‘principles’) – put learning first

Ensure that the technical core (the learning environment) is not at odds with the organisational environment

Go to scale by developing the ‘meso’ level: learning-focused networks and communities of practice

System-level leadership to create favourable conditions and capacities for micro and meso change
Thank you!

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