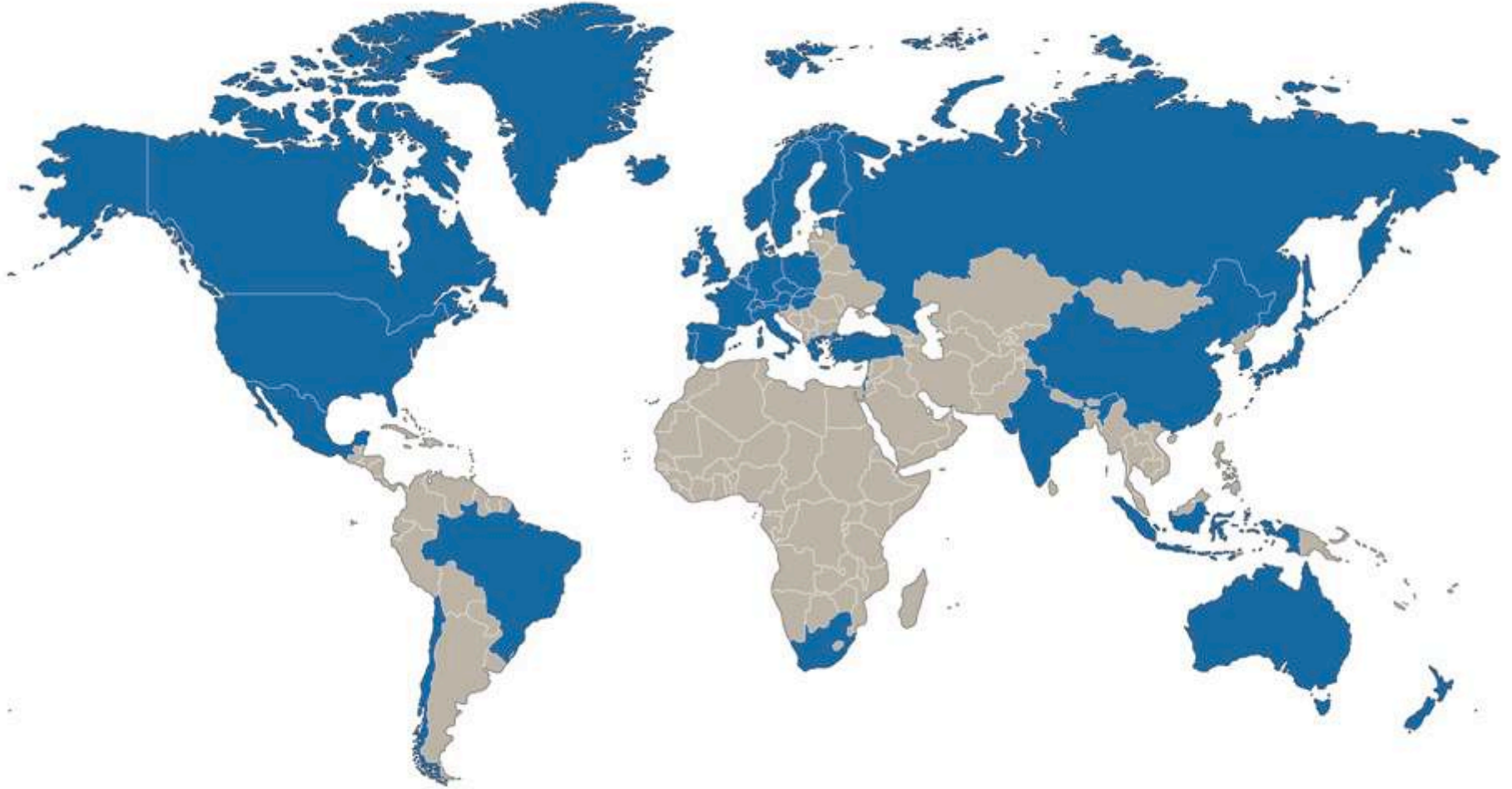# CREATING EFFECTIVE LEARNING ENVIRONMENTS:

OECD WORK ON EDUCATION BUILDINGS

Alastair Blyth, Senior Lecturer University of Westminster
Torniamo a Scuola / Back to School
3 Mar 2017, Politecnico di Milano, Milano

Organisation for Economic Co-operation and Development

35 Member countries
Accession countries: **Colombia, costa Rica, Lithuania**
Ongoing membership talks with **Russia**
Key Partners: **Brazil, China, India, Indonesia,** and **South Africa**

OECD Directorate for Education and Skills

Early Childhood Education and Care

Schooling

Transitions beyond Initial Education

Higher Education

Adult Learning

OECD Learning Environments Evaluation Programme

Overseen by Group of National Experts on Effective Learning Environments – an International network

Current members of GNE: Austria; Greece; Ireland; Italy; Japan; Mexico; New Zealand; Luxembourg and Norway. Observers: IDB; World Bank EIB

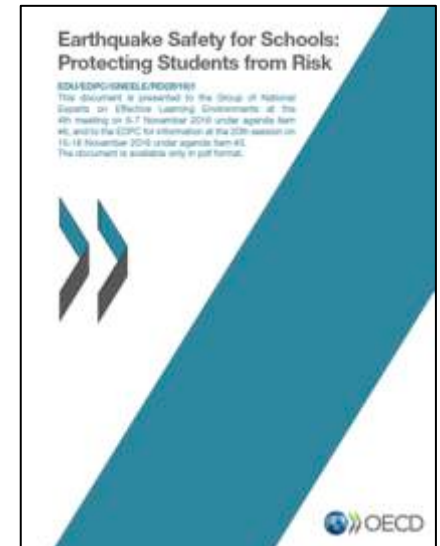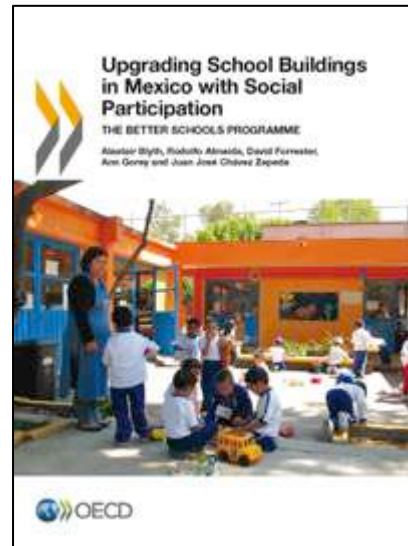# OECD Work on Physical Learning Environments
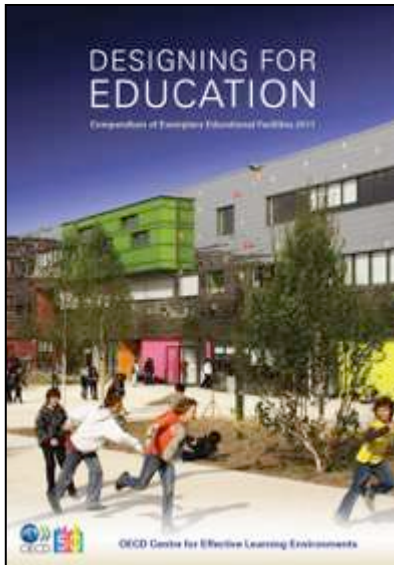
Procurement

Community

Innovation in design

Impact of learning environment

Earthquake safety

DESIGNING FOR EDUCATION

Compendium of Exemplary Educational Facilities 2011

OECD Centre for Effective Learning Environments

CELE Database of Educational Facilities
http://edfacilitiesinvestment-db.org

OECD Pilot Project: Evaluating Quality in Educational Spaces

FINAL REPORT

OECD Pilot Project on Evaluating Quality in Educational Spaces

DRAFT

IQES

OECD

7 countries
Mexico, Brazil, Portugal, Denmark, New Zealand, Norway, UK

22 schools
1710 students
257 teachers

Tools:
Priority rating exercise for quality
Educational facility analysis
Student and teacher questionnaires
Focus groups

Utterslev School Copenhagen, Denmark

Construction of the school commenced in 2002 and was completed in 2006.

Utterslev School Copenhagen, Denmark

STUDENTS' VIEWS

There were 88 responses to the student questionnaire, and 1 focus group was conducted with 8 students

What works…

Comfort:

✓ Classrooms have good lighting so students can work comfortably (SQ, 78%) and there is natural light in classrooms from windows (SQ, 82%).

Learning spaces:

✓ There is plenty of space to move around the classroom and work with others during class (SQ, 74%).

Safety and security:

✓ Students feel safe in the school (SQ, 88%) and in the school grounds (SQ, 83%) (SFG).

✓ Most students know how to find the emergency exits (SQ, 94%).

Utterslev School Copenhagen, Denmark

STUDENTS' VIEWS

What doesn't work

Access:

X Routes and pathways around the inside (SQ, 31%) and outside (SQ, 27%) of the building are not well signposted or easy to identify for visitors or newcomers.

Comfort:

X Noise from inside (SQ, 19%) and outside the classroom SQ, 24%) – notably in the hallway and common area SFG) – disrupts students' work.

X Chairs are uncomfortable (SQ, 29%).

X There is a draught in some of the classrooms in winter (SFG).

X Mechanical window openings are noisy and windows let in too much sunlight in summer (SFG).

Utterslev School Copenhagen, Denmark

TEACHERS' VIEWS…

There were 8 responses to the teacher questionnaire, and 2 interviews were conducted with teachers

What works for teachers
Comfort:
- ✓ Classrooms have good lighting (TQ, 89%).

Facilities and equipment:
- ✓ There is electronic equipment for use such as video projectors, DVDs and projection screens (TQ, 100%).

Learning spaces:
- ✓ The common room functions well at the morning gathering and strengthens the school's social environment (TI).
- ✓ Spaces in the school facilitate project-oriented work and allow for social time and networking across classes (TI).
- ✓ The best room is closed with space for two classes, with a partition between them (TI).

Utterslev School Copenhagen, Denmark

TEACHERS' VIEWS…

What doesn't work for teachers

Comfort:
X Temperature in the classroom is uncomfortable in summer (TQ, 11%) due to the large windows (TI), and there is no heating or flooring in the common room (TI).
X Teachers cannot control ventilation and temperature in classrooms (TQ, 11% and TI).
X Noise from outside the classroom disrupts students' learning (TQ, 33%), especially between classrooms (TI).
X Mechanical window openings are noisy (TI).

Facilities and equipment:
X Furniture cannot be easily moved to accommodate a range of learning activities (TQ, 56%).

Learning spaces:
X Spaces are not large enough to accommodate the number of students taught (TQ, 44%).
X There is insufficient space for teachers to work at desks or move around during teaching (TQ, 33%)

Modernising Secondary School Buildings in Portugal

Alastair Blyth, Rodolfo Almeida, David Forrester, Ann Gorey, Gaby Hostens

OECD

Upgrading School Buildings in Mexico with Social Participation

THE BETTER SCHOOLS PROGRAMME

Alastair Blyth, Rodolfo Almeida, David Forrester, Ann Gorey and Juan José Chávez Zepeda

OECD

For true modernisation **more** is needed than just improvements to the physical infrastructure…

…**Teachers** needs to be engaged too

To meet the demands of 21st Century skills

Education *systems are expected to help students develop:*

Way of thinking: Creativity, Critical thinking, Problem-solving

Way of working: Collaboration, Teamwork, Adaptability, Leadership

Way of living together: Curiosity, Empathy, Self-esteem, Resilience

Pedagogy: *From Teaching to Learning*

Teaching and teacher centric
Teacher as knower/expert
'Covers' the curriculum
Knowledge as certain
Learner passive
Sort learners

Learner and learning centric
Teacher facilitates learning
Engages learner in 'discovering'
Knowledge as evolving
Learner active
Developing capabilities to learn for life

OECD

.... learning has moved from:

Uniformity and conformity to **Individualised, collaborative**

Delivery Driven

Learning led

Separate classroom;
Single spatial layout

Variety of spaces;
Variety of layouts

OECD Learning Environments Evaluation Programme (LEEP)

Enriching the international evidence base

Objective of LEEP

Produce **instruments** and **analysis** that inform school leaders, researchers, policymakers and others about how **investments in the learning environment**, including the physical learning environment and technologies, translate into **improved** education, health, social and well-being **outcomes**, leading to more efficient use of **education resources**.

Learning Environments Evaluation Programme (LEEP)
Enriching the international evidence base

How can the physical learning environment contribute to *improved outcomes* for students and better support the needs of education through *sufficient*, *effective* and *efficient* use of education resources?
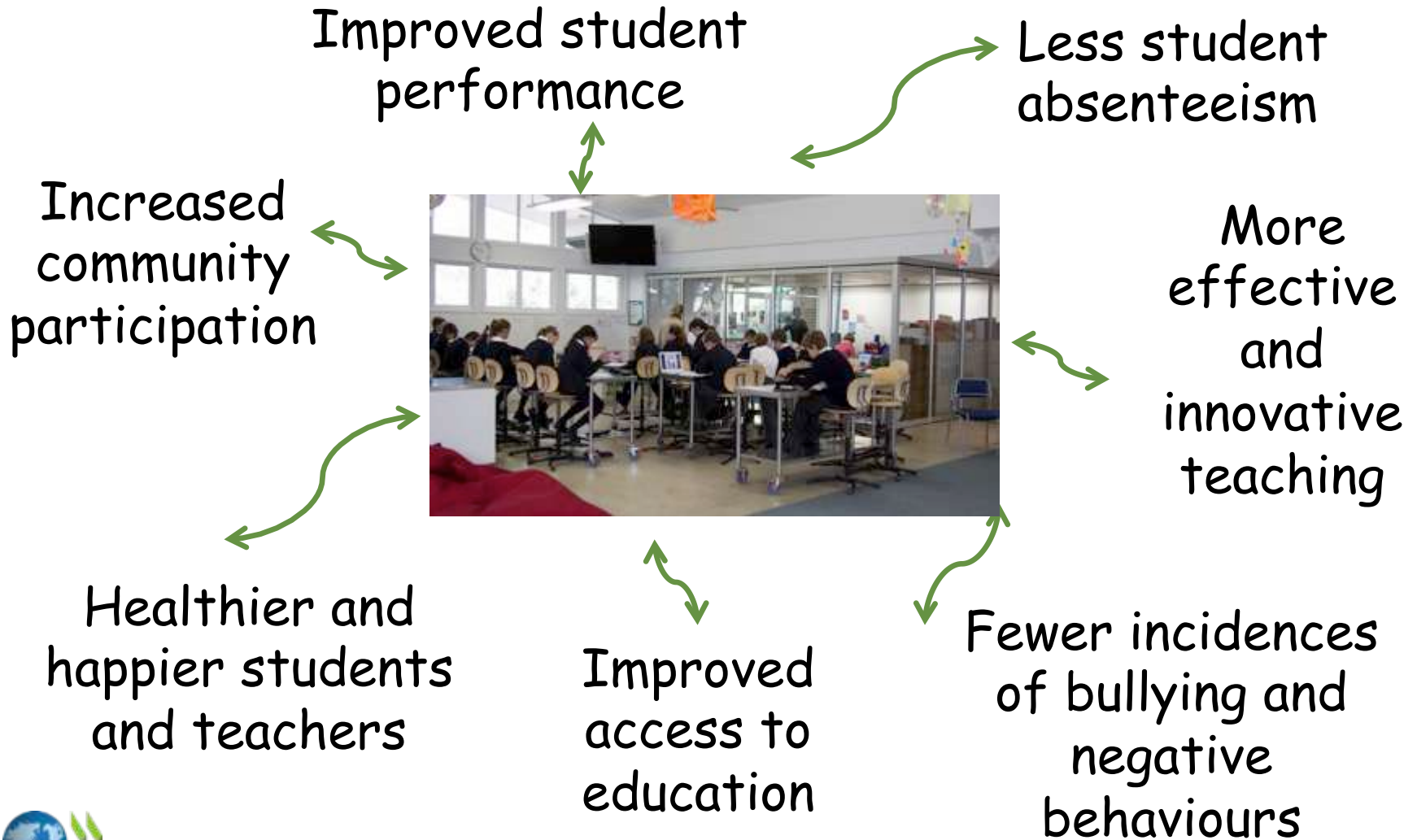
❖ Learning outcomes
❖ Behavioural outcomes
❖ Social outcomes
❖ Health and wellbeing outcomes

Survey to be implemented across countries

Originally asked to use PISA as the cognitive measure

Now countries can use their own measure cognitive measures

LEEP: Explore Desired Outcomes

Improved student performance

Less student absenteeism

Increased community participation

More effective and innovative teaching

Healthier and happier students and teachers

Improved access to education

Fewer incidences of bullying and negative behaviours

Learning Environments Evaluation Programme (LEEP)

Three Survey instruments

School principals: Focus - Background data on schools
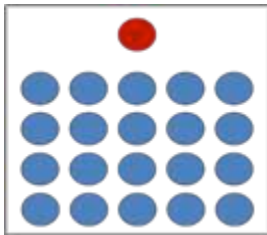
Students: Focus - Comfort; safety and well being

Teachers: Focus - Usability of environment

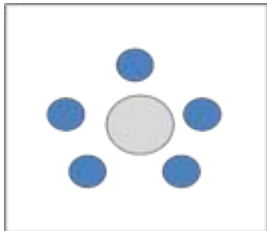**Field trial**: In progress
4 countries - 24 schools 800 students

Teacher questionnaire
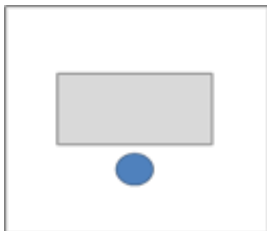
Section 6: Arrangement of the space

Presentation:
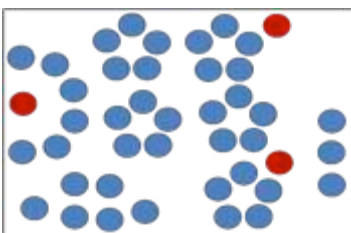Layouts that support explicit instruction/presentation to the whole group.

Group:
Layouts that support approaches where students are required to collaborate and work in small groups to share ideas and help each other.

Individual:
Layouts that support approaches where students work independently to write, read, research, think and reflect.

Team teaching:
Layouts that support approaches where two or more teachers work collaboratively with groups of students sharing the same space.
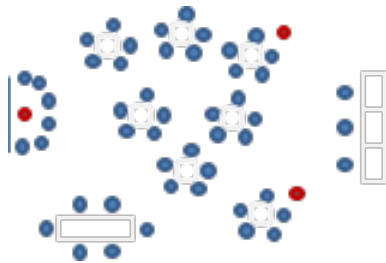
How easy is it to use the spaces in different ways?

Presentation to whole groups

Working independently

Large group discussion

Small project group work

Thank You!

A.Blyth@westminster.ac.uk

CELE Database of Educational Facilities *http://edfacilitiesinvestment-db.org*

Blog: *www.alastairblyth.com*

@alastairblyth