DIRECTORATE FOR EDUCATION AND SKILLS

Learning Environments Evaluation Programme (LEEP)

OECD

Foreword

The physical learning environment is an influential element in the complex and highly contextualised nature of learning. Through the Learning Environments Evaluation Programme (LEEP) we are aiming to see how learning environments can most effectively support the pedagogies, curriculum, assessment and organisational forms necessary to develop students' capacities for the 21st century. For that, the LEEP produces instruments and analyses that inform school leaders, researchers, designers, policymakers and others about how investments in learning environments, including educational spaces and different technologies, translate into improved learning, health, social and well-being outcomes, leading to more efficient use of education resources.

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OECD Director of Education and Skills

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What is the Programme?

The Learning Environments Evaluation Programme (LEEP) seeks to:

- **develop the evidence base** for how the physical learning environment[1] impacts on learning by continuing the implementation of the LEEP evaluation methodology (through the LEEP module) and carry out analysis of existing research, data and literature.
- **create best practice guidelines** supported by toolkits to assist OECD countries in developing physical learning environments that meet the needs of 21st century learning and guide investment decisions.

[1] A physical learning environment is a term used to describe the interplay between the physical resources and complex learning, social, online, and other environments.

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LEEP Activities

LEEP currently undertakes the following activities:

- Prepares the publication of the **LEEP framework**, which underpins the LEEP evaluation methodology and module;
- Analyses findings from the **LEEP module field trial** in Norway (report forthcoming in Q3 of 2017);
- Develops **case studies** on the learning environments of high performing PISA schools (proposal to be presented on 9-10 October 2017 in Oslo, Norway at the meeting of the programme's Group of National Experts on Effective Learning Environments);
- Monitors country practices in regards to the **OECD Recommendation** concerning Guidelines of Earthquake Safety in Schools (an illustrated version of the last monitoring report was published in Q1 2017; the next monitoring report will be released in 2020);
- Manages the **Database of Best Practices** in Educational Facilities (ongoing).

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How do school buildings support teaching and learning? And what is their impact on outcomes?

3 dimensions: effectiveness, efficiency, sufficiency

As defined by LEEP framework, the factors that lead to successful education outcomes include 3 dimensions:

- achieving effective learning environments (*effectiveness*[2]*),*
- enabling more efficient use of space with regard to resource and space planning, use and management (*efficiency*[3]*)*, and
- providing sufficient to meet the minimum requirements to ensure users' comfort, access, health, safety and security (*sufficiency*[4]*)*.

[2] **Educational effectiveness:** the ability of a school or school system to adequately accomplish its stated education objectives. Studies of educational effectiveness analyse whether specific resource inputs have positive effects on outputs, broadly defined (OECD, 2013).

[3] **Educational efficiency:** the achievement of stated education objectives at the lowest possible cost. In other words, efficiency is effectiveness plus the additional requirement that this is achieved in the least expensive manner (OECD, 2013).

[4] **Educational sufficiency:** the baseline components of the built environment which are considered necessary conditions for providing the affordances most likely to impact on student learning (e.g. access to safety, water, natural light, power, heat and technology) in changing demographic, social and political contexts.

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The LEEP module consists of:

LEEP Questionnaires on **effectiveness, efficiency and sufficiency**		
Student questionnaire	Teacher questionnaire	School questionnaire
21 questions	30 questions	14 questions
5 sections	8 sections	4 sections
Common question about overall satisfaction		

...and focuses on:

- comfort, safety & well-being
- usability of space & spatial arrangements
- information about the whole school

Each questionnaire takes less than 20' to complete and the test can be online or pen-and-paper.

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LEEP longer term vision (2017 - 2022)

Through a three-phased approach from 2017 to 2022, the LEEP plans to

- continue the implementation of the LEEP evaluation methodology and carry out analysis of existing research, data and literature to develop the **evidence base** for how the physical learning environment impacts on outcomes, and develop a framework for the best practice guidelines (Phase I);
- focus on developing the framework and evidence to create best practice **guidelines and recommendations** which can be used to guide investment decisions (Phase 2); and
- develop toolkits to support **policy making**. The impact of policy may then feed forward into the evidence base again (Phase 3).

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Who can participate?

LEEP is overseen by the OECD Group of National Experts on Effective Learning Environments (GNEELE), which is composed of experts in learning environments, nominated by OECD delegations with the support of national or sub-national ministries of education. Participation is open to all OECD member countries and observers.

All members of the GNEELE have the opportunity to:

- Join a peer network, share information and benefit from LEEP's interdisciplinary approach and the expertise of our members who include educators, architects, designers, policymakers and researchers.
- Access tools and methodology for improving the effectiveness, efficiency and sufficiency of the physical (built) environment.
- Learn from the outcomes of the LEEP reviews.
- Participate in the annual meetings of its Group of National Experts (GNEELE) in Paris.
- Contribute to the LEEP programme of work, thereby helping to shape the evidence base and influence the research agenda for building effective learning environments and links to improving education and other outcomes.
- Profit from reduced registration fees to attend conferences and workshops (co-) organised by LEEP.
- Obtain free copies of published reports.

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Participating countries

Austria	Italy	Mexico
Greece	Japan	New Zealand
Ireland	Luxembourg	Norway

Why join? Benefits for participating countries:

Italy

The GNE is an important opportunity for Italy to share international information and best practices on School Building safety and Learning Environments in order to implement the Italian National Plan for School Building.

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Educational facilities are an important factor for realising high quality education and are the basis of all activities that are conducted in schools. Through our participation in the GNE, we hope to form a worldwide network with experts in educational facilities so that teachers and students all over the world will be able to benefit from a high quality education supported by educational facilities (educational foundation).

Japan

The Ministry in Luxembourg is interested to learn from other countries how good design can support better learning – "building it right from the start" – and how the impact of the building on learning might be measured.

Luxembourg

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At INIFED, we aim to position the educational infrastructure as a fundamental part of public education in our country in order to keep providing quality facilities that allow our youth to access better opportunities through knowledge. The GNE is an important means of helping us achieve a public educational infrastructure of dignity, modernity and quality through involvements in applied research, normalisation, construction and implementation of programs and projects all over the world.

Mexico

We value our engagement with the GNE, and with our counterparts in other countries. It is extremely valuable to us to have the opportunity to access examples of best practice in facility design, provision of capacity, management and procurement. This information enables us to leverage off a substantial body of experience and research to the benefit of New Zealand education as a whole.

New Zealand

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How to participate?

LEEP activities are financed by counties' voluntary contributions.

Countries wishing to participate in LEEP are invited to contact the OECD Secretariat. Further information about the project, the recent activities and the participation costs is available upon request. Once a country wishing to participate submits the "offer letter for voluntary contributions", the OECD will prepare the relevant invoice.

If you wish to participate in the LEEP work, receive the template for an offer letter or would like to know more, please contact Ms Julie Velissaratou [Julie.VELISSARATOU@oecd.org].

Please note that the GNEELE meetings are open to all OECD member countries and observers.

For further information, please visit:
_the website: www.oecd.org/edu/facilities
_the database: http://edfacilitiesinvestment-db.org/

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Did you know?

A physical learning environment is the result of interactions between physical resources (i.e. learning spaces, material and technology), learners, educators, content, learning leadership, society and policy (OECD, 2008; Tanner and Lackney, 2006). **The physical learning environment can produce conditions (Gibson, 1977) and mediate relationships that can improve student learning along a range of indicators (cognitive, physical and mental wellbeing) and the quality of relationships.**

The notion of learning spaces raises issues around **spatiality***, **connectivity*** and **temporality*** and how these mediate pedagogical and other relationships that can improve student learning.

***Spatiality** - Space (and place as natural and built environments) "shapes" social relations and practices in schools and communities (Leemans and von Ahlefeld, 2013; Lefebvre, 1991; McGregor, 2003, 2004; Massey, 1994, 2005).

***Connectivity** - Learning spaces and technologies together mediate the relationship and social practices of teaching and learning, and are two factors among many in the complex relationships of teaching that inform learning in schools (Oblinger, 2006). Teachers and students construct how technology is mobilised in different spaces (Bissell, 2002).

***Temporality** - There is a temporal dimension to the development, use and impact of learning spaces. Changes in the nature and use of different physical spaces (open/closed; indoor/outdoor; physical/virtual; core/non-core hours) are related pedagogically and organisationally to changes in time organisation (e.g. team teaching or community based service learning have different time demands (Anderson-Butcher et al., 2010)).

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OECD and the Directorate for Education and Skills

The OECD promotes policies to improve the economic and social well-being of people around the world. It provides a forum in which governments can work together to share experiences and seek solutions to common problems. The organisation:

- support sustainable economic growth
- works with governments to understand what drives economic, social and environmental change
- measures productivity and global flows of trade and investment
- analyses and compares data to predict future trends
- sets international standards on a wide range of activities and products
- looks at issues that directly affect people's daily lives, like how well countries' school systems are preparing their young people for modern life
- recommends policies designed to improve the quality of people's lives.

The OECD Directorate for Education and Skills focuses on helping countries to identify and develop the knowledge and skills that drive better jobs and better lives, generate prosperity and promote social inclusion, and accompanies them in the difficult process of policy implementation.

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For more information on the programme, visit:
www.oecd.org/edu/facilities

For our database on best practices in educational facilities, visit:
http://edfacilitiesinvestment-db.org/

If you have questions, you can reach us at:
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