



Scotland's Learning Landscapes
Shared Learning Spaces Team



Architecture &
Design Scotland
Ailtearachd is Dealbhadh na h-Alba

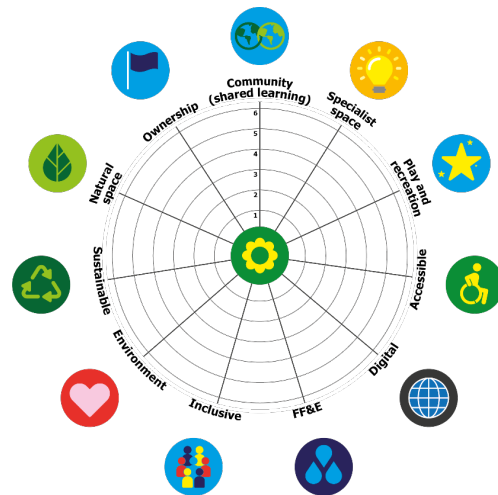


THE UNIVERSITY OF EDINBURGH
Moray House School of
Education and Sport

June 2020

Scotland's Shared Learning Hub: A Scoping Document

Creating a dynamic forum building on collaboration and co-design for educational spaces, leading to substantial longitudinal research and innovative learning practices for sustainability in a post-COVID era.





Our Aim

To launch Scotland's Shared Learning Hub bringing together multi-disciplinary, cross-sectional experts for co-design and co-research. The Hub will focus on the dynamic role of shared spaces to support quality learning in our schools - post-COVID.

As education and design experts, we seek to build on national capacity for futures thinking across different fields, connecting physical, virtual, indoor and outdoor spaces for the education and wellbeing of all our young people.

What the National Hub will do:

- ◉ **Enable Scotland to lead**, influence and model innovative co-design principles and practices for shared learning across national and international boundaries.
- ◉ **Build on pioneering co-design** work to put into practice the Scotland's Learning Landscapes user guide, created by Architecture and Design Scotland (ADS) and the Shared Learning Spaces Team, University of Edinburgh (SLS, UofE).
- ◉ **Promote alternative approaches** for sustaining a co-located dynamic curriculum (CfE), using transformational technology-enhanced learning, shared across individual, group, local, national and international spaces.
- ◉ **Model dynamic practice** and carry out robust research, ranging from quick-response to the longitudinal, to evidence and promote quality learning spaces prioritising the safety, health and wellbeing of all learners and teachers in the post-COVID world.
- ◉ **Bridge the gap** between school and community. We believe that community spaces can be transformed into agile pedagogic spaces.





Scotland's Learning Landscapes: Shared Learning Design Planning Tool

Scotland's Learning Landscapes is a design and learning spaces assessment tool, which facilitates an interdisciplinary, participatory process for shared, inspiring and agile learning spaces. The toolkit can be used for scenarios ranging from small scale interventions to existing spaces to large scale new builds, using an approach to design where digital, indoor and outdoor spaces are seen as a whole. The concept has been created by Architecture & Design Scotland collaboratively with the Shared Learning Space Team from Moray House School of Education and Sport, University of Edinburgh.

The process has been designed for use in both existing and new learning environments. This is particularly relevant in the context of the Scottish Government's 'restart and renew' strategy that requires alternatives to and expansion of the learning estate to include outdoors and digital spaces. The toolkit promotes a language, developed with learners and teachers, to prioritise spatial and design literacies to express ideas and concepts of shared learning co-design and planning.



Typologies and Values

The toolkit includes a set of learning experience typologies for designing activity-based spaces. Additionally, symbols representing design values can be applied to indoor, outdoor and digital spaces with 'kindness at the core'. This aligns with the revised National Performance Framework, ensuring learning environments foster Scotland's ambition to be the best place in the world to grow up and learn.

Promoting the Toolkit

A prototype of the toolkit, aligned with the holistic approach to Scotland's Learning Estate, is being promoted by a National Advisory Panel, set up by ADS and SFT. The panel comprises experts in education and design across Scotland from Early Years through to Higher Education. As outlined in the Learning Estate Strategy, "*The learner should be at the heart of decision making in the learner estate across Scotland.*"



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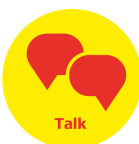
Typologies

Campfires in
Cyberspace



Kindness at the heart of
shared learning design

Key Zones for Activity
Based Spaces



Participatory Toolkit – Paper/Digital/3D



Digital



Outdoor

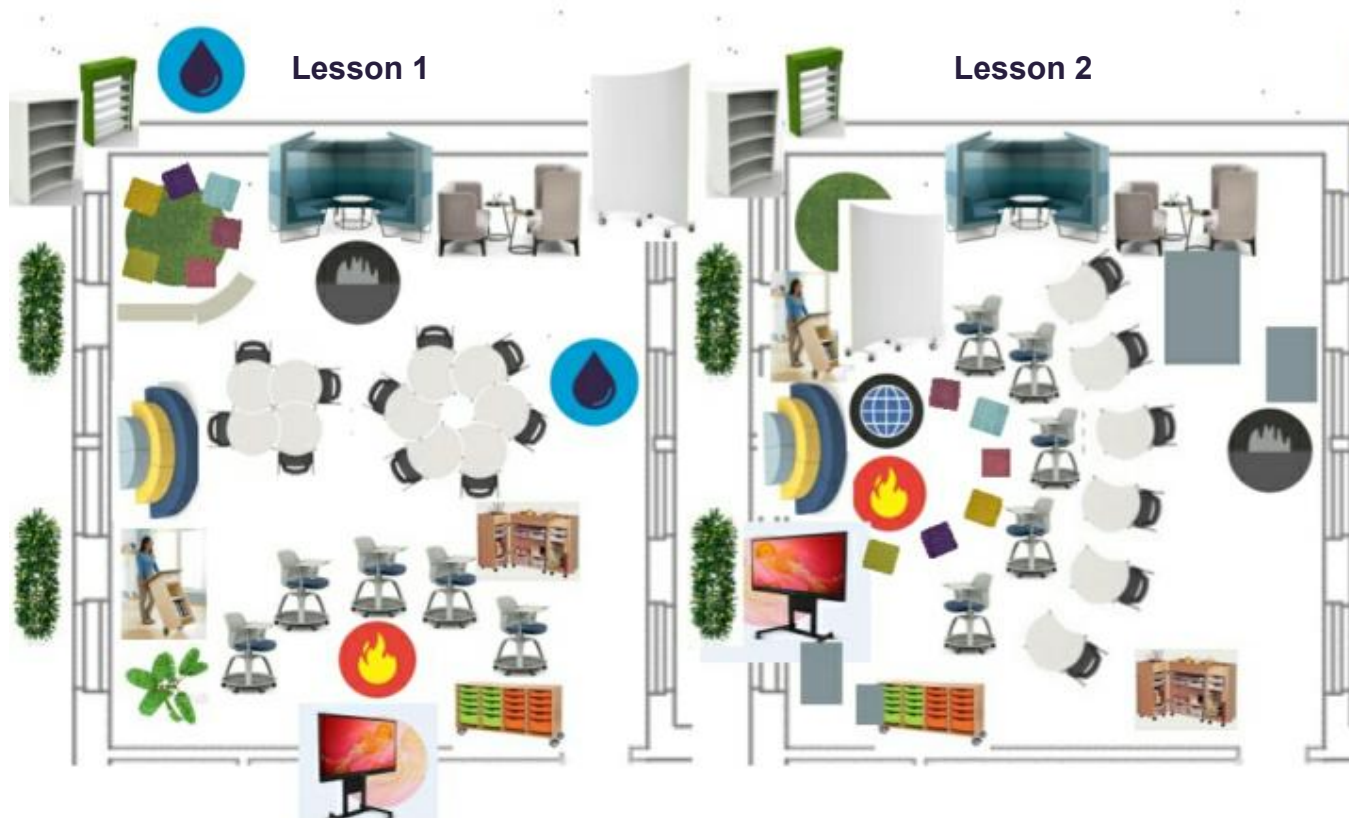


Indoor



Creating a language for agile and shared learning design

Example of an agile learning space co-created with learners using the toolkit.





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Using the Assessment Tool + Risk Calculi = All values underpinning the restart & renewal of Scotland's Learning Estate.

Assessing & Maintaining **all** values in renewed indoor/outdoor and digital shared learning environments.

Restart and Co-Design: August 2020 – June 2021

Transition to Renew: August 2021 – June 2025

Central to shaping outcomes is learner participation, user engagement and evidence led practice. The learner should be at the heart of decision making in the learning estate across Scotland. Understanding the learner in their specific contexts matters to achieving the ambition of excellence and equity for all"





The Shared Learning Spaces Team (SLS, Moray House) consists of pedagogic and research experts, working with the shared learning concept to create enriched learning experiences which connect and cut across physical, social and pedagogic boundaries. These spaces empower learners as global citizens to share, explore and better understand the world within and beyond the confines of the classroom whilst fostering the values embedded in co-creating with learners a dynamic and responsive curriculum.



Focusing on Scotland's future workforce, the toolkit in *Scotland's Learning Landscapes* is being used to raise spatial and design awareness for shared learning in Initial Teacher Education programmes at Moray House.

The co-design concept brought together ADS, UoE SLS Team and stakeholders (agile designers, digital and pedagogic experts) into a unique collaborative. The SLS Team brings extensive experience of pedagogic innovation and research to prioritise the dissemination, critical evaluation and sustainability of the underpinning values of the toolkit. Equipping future teachers with the skills for designing shared learning within a co-located, dynamic curriculum for deeper learning is a priority for sustainability in a rapidly changing world.





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Indoor



+



Digital



+



Outdoor



=



**Shared Learning
Spaces**





Learning from current global 'adaptations to learning spaces'

COVID has brought about unprecedented challenges, requiring Scotland's Learning Estate to explore a Shared Learning Environment for co-located learning. This impacts on all sectors - nurseries, schools, colleges, universities and centres for life long learning - which necessitates reflection on the design values to create the best shared learning environments possible given the probable recession and aftermath of a world crisis.

As outlined in Scotland's Learning Estate Strategy, *"Central to shaping outcomes is learner participation, user engagement and evidence led practice... Understanding the learner in their specific contexts matters to achieving the ambition of excellence and equity for all."*

Scotland's Learning Landscapes provides a practice-oriented values-driven framework to support and guide teachers, learners and their communities in reconceptualising learning which fosters co-location and avoids isolation and disconnect.

Exploring alternatives which provide adaptive, dynamic, sustainable, enriched spaces where curriculum is co-designed and 'owned' by pupils and their teachers in learning communities.





Scotland's Learning Landscapes
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Our guiding principles, based on the values promoted by the Scottish Government

Evidence based shared design and learning

Multi-disciplinary & participatory design

Evidence based practice and evidence based design

Excellence and equity

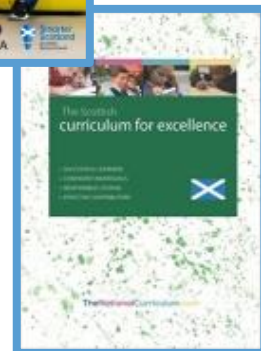
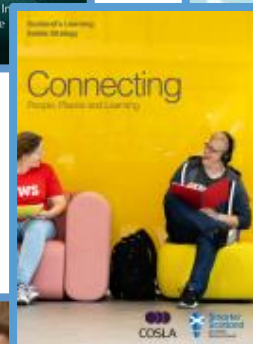
Shared Learning

Wellbeing

Attainment

Achievement

Ownership





Scotland's Regions as 'Shared Learning Environments'

A key message from Advisory Panel was the need to **sustain** the processes in *Scotland's Learning Landscape*, to use **research evidence** and to engage in **innovative practice + design** once implemented. The SLS Team as key designers in Scotland's Learning Space Hub can enable future teachers to understand alternative high-leverage conceptualisations of learning so as to significantly contribute to a changing landscape in schooling. Fundamental principles of spatial literacies for shared learning can be embedded into the future directions of schooling (e.g. school improvement plan and curriculum) as part of a planned programme of research.

Globally there are excellent examples including labs and organisations funded by governments and companies, exploring how technology can support innovative pedagogical approaches to teaching and learning (see annex). *Scotland's Learning Landscapes* is the first of its kind to combine pedagogic and design principles. A physical base at Moray House, a stone's throw away from Architecture and Design Scotland headquarters, will promote collaboration across the regions, activating a shared learning approach. The hub as a physical and virtual space has the advantage of technological infrastructure, combining experiential, pedagogic and physical learning environments as one.

A nationwide collaborative approach, demonstrating evidence placed practice and design, to engage with learners and assist with transition to Scotland's renewed Learning Estate Strategy.



1. SLS 'HUB'



3. Co-Design Collaborative 'Nationwide Shared learning language & design approach'



2. Co-Design 'Whole Region(s) as a Learning Environment'



4. Engage in International networks by sharing innovative practice and design



Edinburgh as a 'Shared Learning Environment'

City

A physical space, digital infrastructure and participatory design are available in Moray House in the heart of Edinburgh. This space can provide a physical and virtual Scotland's Shared Learning Hub central to a multi-disciplinary and participatory innovation.

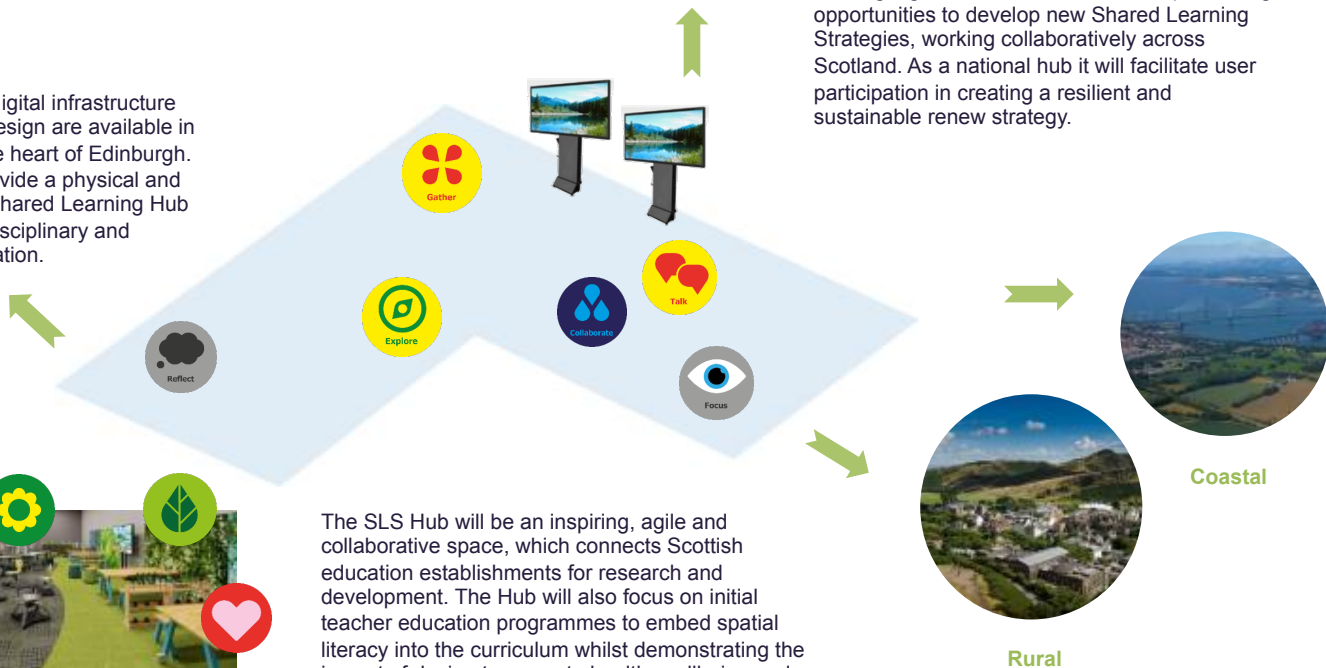


Image Inspiration Ref Activate Classroom
by MA+ Architecture



Edinburgh – Lothians – Scotland – Global

In Room 5.11 Charteris Land (plan below), an existing digital infrastructure can offer pioneering opportunities to develop new Shared Learning Strategies, working collaboratively across Scotland. As a national hub it will facilitate user participation in creating a resilient and sustainable renew strategy.



The SLS Hub will be an inspiring, agile and collaborative space, which connects Scottish education establishments for research and development. The Hub will also focus on initial teacher education programmes to embed spatial literacy into the curriculum whilst demonstrating the impact of design to promote health, wellbeing and a sense of belonging for all learners.



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SCOTTISH
FUTURES
TRUST



3D Design and Tours

"Virtual models would be a long-term asset to the school to enable engagement beyond the restrictions of COVID-19. The model could be used annually for each intake and could be circulated to primary 7-year groups annually. Equally, where community facilities exist, it could be openly available to communities as well"

In addition to a 2D planning tool, the toolkit can be applied to 3D models in design planning and in orientation tours of space, whether physical or virtual. For example, the tools can be integrated into CAD and BIM 3D modelling at design stage or used to structure physical or virtual tours of a space.

Multivista is a company providing construction photo and video documentation services which has developed 360° photography tours of buildings. These tours are being developed as a case study with SFT to assist with orientation and familiarisation. Multivista will provide resources to support integrating typologies and values as a learning design planning tool. They will provide digital means to assist in developing virtual models as a long-term asset to the school. In the post-COVID-19 era, these tools will support orientation & familiarisation with learning design planning as well as engagement with communities.





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Utilising asset information to sustain and develop shared learning design





Our Journey and Future Pathways

Restart and renew

- ◉ *Scotland's Learning Landscapes* makes accessible processes for designing shared learning and assessment. It introduces a user-friendly 'language' for **adapting learning spaces** – urgently needed post-COVID.
- ◉ This common language supports the Scottish Government strategy of **renewed learning environments** and will enable awareness raising of spatial and design literacies for staff and pupils. It will encourage confident design of shared learning environments utilising Scotland's digital, indoor and outdoor learning estate.

Research Informed

- ◉ Using global examples of practice and design for shared, agile learning environments, and supported by an Advisory Group, the Hub will respond to an identified need for robust **research**. There is a growing demand to evidence the **impact** of learning environments and spatio-pedagogic approaches on pupil attainment, achievement, health and well-being.





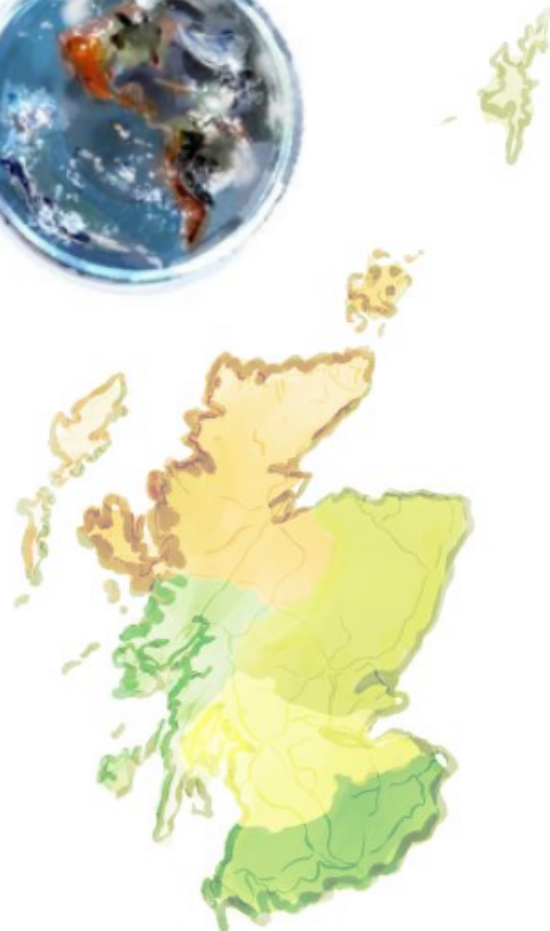
Our Journey and Future Pathways

Scotland's Shared Learning Hub

The creation of Scotland's Shared Learning Hub will signal a unique national centre of excellence for futures thinking. It will develop the work of the Advisory Panel, building confidence and a shared holistic approach to the new **post-COVID-19 Learning Estate Strategy**.

Scotland's Shared Learning Hub, based at the university of Edinburgh will:

- ⦿ Enable Scotland to be a major player in post-COVID educational thinking.
- ⦿ Exemplify 'powerful' joined up thinking in ways which have not before been achieved.
- ⦿ Engage in researching transformational pilot spaces and their impact on learning.
- ⦿ Provide an experimental space for stakeholders to transform their practice and thinking.
- ⦿ Act as a national/international platform to facilitate knowledge exchange and build global connections.
- ⦿ Ensure future teachers are entering the profession with a deeper understanding of how space and lesson design impact on their learners.
- ⦿ Promote understanding of curriculum as an equitable, co-located space and re-energise outdoor learning within and across boundaries.
- ⦿ Address post-COVID educational challenges (especially space, environment, attainment and mental health) in a connected and strategic way to support Scottish education, learners, families and communities.
- ⦿ Provide a sustainable and future-proof design national Hub which is unique and embraces fundamental learning design.





Shared Learning Design Team: 'A Collaboration in Education Practice & Design'



Professor Do Coyle

Do is currently Professor in Language Education and Classroom Pedagogies at Moray House School of Education and Sport, University of Edinburgh. She is Director of Research and Knowledge Exchange and is internationally renowned for creating teacher tools for use in bilingual classrooms (Content and Language Integrated Learning) for which she was awarded the honour of Chevalier dans l'Ordre des Palmes Académiques by the French Government. Her signature research and innovation, however, involve integrating technology - enhanced shared learning into classroom pedagogies. She co-led the Visual Learning Lab (University of Nottingham) and was designer of the TePL initiative (Technology-enhanced Professional Learning) at the University of Aberdeen. Her passion lies in working with teachers to develop co-designed learning spaces with pupils which leads to agile, shared and meaningful experiences for all.



Lesley McMillan BA (Hons), SBID Interior Architecture

Lesley is an Architectural & Interior Designer. Leading on the formation of Scotland's Learning Landscapes on secondment with Architecture & Design Scotland in early 2020, she is an award winning Interior Designer at the City of Edinburgh Council with 20 years of experience in designing education and community environments in Local Authorities and Higher Education. As Chair of the Education Design Advisory Council for the Society of British and International Design and Scottish ambassador for HundrED.org Lesley is particularly passionate about designing inclusive and holistic educational spaces seeking to put effective design at the core of the learning process and show how evidence-based design decisions can transform the learning experience for everyone.



Shared Learning Design Team: 'A Collaboration in Education Practice & Design'



Ramone Al Bishawi

Ramone is a Research Associate and Project Manager at Moray House School of Education and Sport, University of Edinburgh. She has extensive experience in education as a researcher and project manager. Prior to working on the SLS Initiative she worked on the Technology-enhanced Professional Learning (TePL) initiative (University of Aberdeen). Her current research focuses on the attainment gap in Scottish education through the exploration of co-designed learning spaces. She is passionate about innovative, inclusive educational practice. Her publications bridge conceptual gaps between professionals collaborating on educational technology initiatives and the development and management of Massive Open Online Courses (MOOCs) within the third sector. Ramone also works in community education and the arts for over 20 years and has awards for international research on community art practices.



Jonathan Hancock

Jonathan is a Research Associate at Moray House School of Education and Sport, University of Edinburgh. He has over seven years professional research experience and has worked on projects relating to issues of pedagogy, social justice, race equality and public policy in academia and the third sector. He has published on spatial identities and belonging, Internationalisation, and pupils learning English as an Additional Language (EAL) through the Centre for Education for Racial Equality in Scotland (CERES). Currently, Jonathan's research work focuses on spatial literacies and equality in education. He is particularly interested in educational research influencing real change through policy and practice.

Timeline

The RIBA Plan of Work 2020 diagram illustrates the 8 stages of a project, from Strategic Definition to Use. The stages are represented by a horizontal bar with numbered circles and corresponding labels:

- 0 Strategic Definition**
- 1 Preparation and Briefing**
- 2 Concept Design**
- 3 Spatial Coordination**
- 4 Technical Design**
- 5 Manufacturing and Construction**
- 6 Handover**
- 7 Use**

Three circular diagrams are also shown, representing different phases of the project:

- BUILD IN**: Stages 0 and 1.
- BUILD ON**: Stages 2, 3, and 4.
- SUSTAINING**: Stage 7.

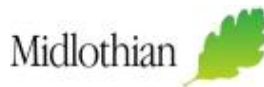
The diagram also includes a circular diagram at the bottom left, which is a detailed version of the 'BUILD IN' diagram, showing the stages 0-1 in a circular format.

Approaching the co-design of post-COVID shared learning strategies in a similar manner to the RIBA stages, to sustain the process



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Advisory Panel



Alliance with Stakeholders

National Network for Outdoor Education

Additional networks to be added

Case Study 1

Physical Learning Hub: Future Classrooms Lab



Created by European Schoolnet, the Future Classroom Lab (FCL) is an inspirational, fully equipped, reconfigurable, teaching and learning environment in Brussels, challenging visitors to rethink the role of pedagogy, technology and design in their classrooms. In the Future Classroom Lab, visitors can explore:

- The competences and roles for students' and teachers' 21st century teaching and learning.
- Different learning styles and more personalised, active learning. Learning environment design and how it can impact student engagement and classroom interaction.
- Current and emerging technology to support all of the above and societal trends affecting education.

Since the opening of the Future Classroom Lab in January 2012, European Schoolnet and its 34 supporting Ministries of Education have worked closely with a growing number of ICT providers to ensure an independently funded and sustainable platform. Policy-makers, industry partners, teachers and other education stakeholders regularly come together in face-to-face training workshops and strategic seminars to develop visions for the school of the future and strategies on how to realise these.



About Future Classroom
Lab

[READ MORE >](#)



Case Study 2

Whole City as a Learning Environment: Helsinki



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Helsinki
Helsingfors

hundrED

The whole City of Helsinki can be regarded as a large learning environment in which learners work actively. Instead of learning taking place only at school and in the classroom during the school day, learning is now viewed as something tied neither to time or place. Because the Helsinki Regional Transport Authority offers free transport to basic education groups and their teachers during school hours, no costs are involved in travelling to the sources of authentic phenomena. learners and teachers can move around freely and learn about real phenomena in an authentic locations for example from parks to historical monuments and museums.

Authentic learning experiences are in urban and rural settings from cultural events to working life collaboration from all learners.

Learning is not location or time orientated, learners are actively engaged to create deep learning experiences and learning is more meaningful as a result.



Whole city as a learning environment

📍 Helsinki, Finland

Case Study 3

A Whole Country Approach to Transition, Developing Typologies: ILETC



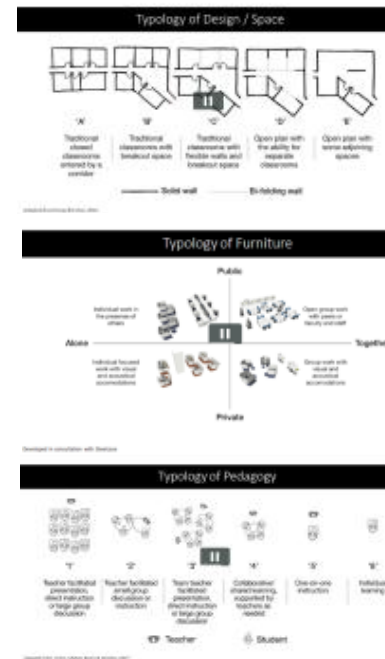
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The Innovative Learning Environments and Teacher Change (ILETC) project is an Australian Research Council (ARC) Linkage Project funded for 4 years from 2016-2019. It brings together the expertise of leading researchers in education and learning environments and partner organisations in education and learning environment design and technology.

The project will be lead by Associate Professor Wesley Imms, who heads a cross disciplinary team of researchers from the Melbourne Graduate School of Education and the Faculty of Architecture, Building and Planning at The University of Melbourne. The project is affiliated with the Learning Environments and Applied Research Network (LEARN).

The *Teacher Transition Survey* was released in Australia on 29th April and 9th May in New Zealand and was open until 22nd August 2019. The aim of the survey is to understand teachers' perspectives on their transition from traditional classroom spaces into more innovative learning environments. The questions ask about the types of spaces teachers' have worked in, the impact of physical spaces on their teaching and what is important in supporting teachers transitioning from traditional to more innovative spaces.





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