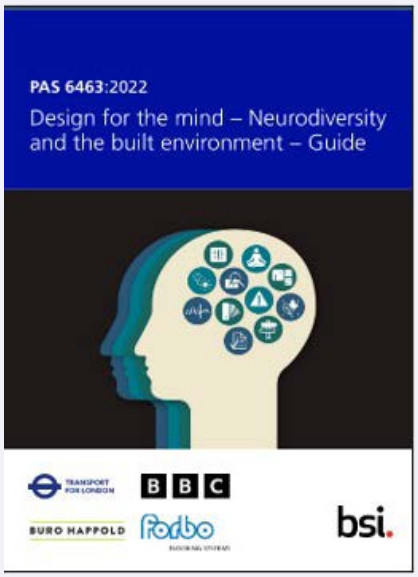
Architecture & Design Scotland
Ailtearachd is Dealbhadh na h-Alba

SCOTTISH FUTURES TRUST

Shared Learning Event

Additional Support for Learning



Introduction

> **'It is the architectural, sensory and social stimuli that creates a barrier to pupils learning.'**
>
> Scottish Parliament Additional Support for Learning Enquiry 2024.

Context

This report is a summary of the Shared Learning Event which was a 2-part event focusing on **Additional Support for Learning (ASL)**. Part 1 focussed on an introduction to ASL, whilst Part 2 focussed on the application of design considerations for ASL. Both events were hosted and facilitated by Scottish Futures Trust (SFT) alongside Architecture and Design Scotland (A&DS).

Part 1 was held on MS Teams on 18th June 2025 and brought together 170 delegates from Local Authorities and consultants across Scotland, including representatives from Scottish Government Learning Directorate. It featured presentations from:

- Jennifer Stirling & Jean Hewitt from Buro Happold
- Fran Foreman from Education Scotland
- Maxine Booth from Aberdeenshire Council

Part 2 was held on MS Teams a week later on 25th June 2025 and brought together 125 delegates from Local Authorities and consultants across Scotland, including representatives from Scottish Government Learning Directorate. It featured presentations from:

- Lesley Riddell Robertson from Architecture and Design Scotland
- Jean Hewitt from Buro Happold

Background

This event was developed in response to the Scottish Parliament "Additional Support for Learning Inquiry 2024". This was carried out on the twentieth anniversary of the Additional Support for learning Scotland Act (2004) which sets out that there should be a presumption of mainstream learning for every child where possible, so every learner can be together in the same place. The inquiry explored - through extensive stakeholder engagement - the key impacts of the act.

One of the emerging topics was a considerable increase in the number of learners with an additional support need, alongside an increase in the complexity of those needs. An important finding of the report was that the physical environment of the school can have a considerable impact on the experience of learners.

Key observations from the inquiry were:

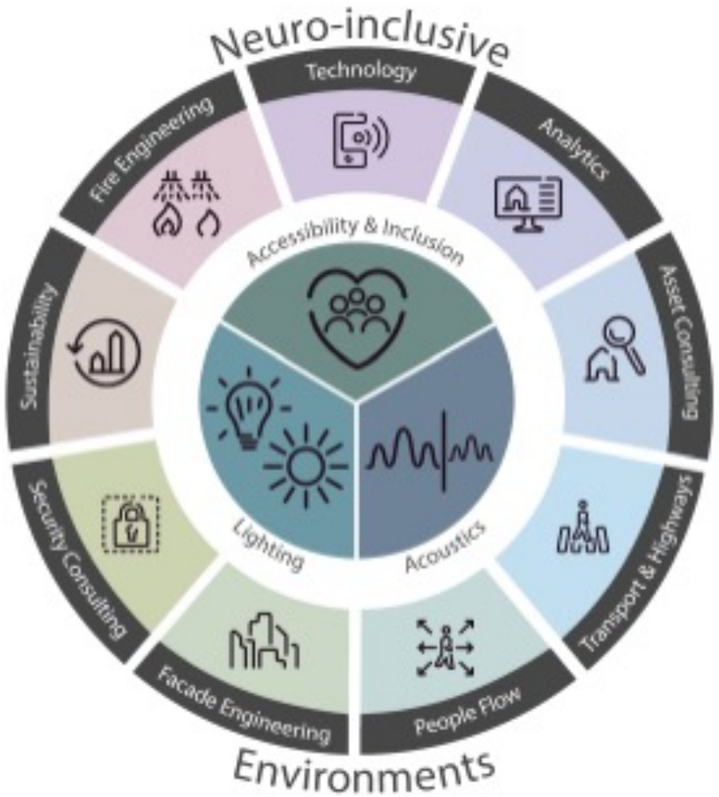
- Learners linked negative experiences to the environment that they were in
- Neurodivergent learners were the most impacted.
- Acoustics, crowds, lighting and smells can all cause an issue

The inquiry suggested, that having identified these particular issues that there should be greater exploration into the physical environment and whether there should be any additional guidance with regards to additional support needs with a focus on neurodivergence. SFT have carried out an initial engagement with: Teachers who are neurodivergent; Parents of learners who are neurodivergent; Learners with lived experience; Academic researchers; Charities and support groups and Architects. This has been done with the view to create a more holistic steering group with key stakeholders to develop guidance.

The emerging topics from nearly a year of engagement are:

- Understanding a range of sensory experiences
- Needs and preferences are very diverse
- Some problems are easily solved
- Interventions require both space and activity planning

Setting the context for neurodiversity and the built environment



Jennifer Stirling & Jean Hewitt

Buro Happold

Jennifer Stirling is is an associate within Buro Happold's inclusive environments team with over 20 years experience specifying and recommending reasonable and practical disability access solutions across a variety of sectors. Jean Hewitt is an associate and technical lead at Buro Happold and is one of the leading practitioners in the field of Inclusive Design, having specialised in inclusive environments and accessibility since 2001.

What is neurodiversity?

Neurodiversity is the variation in neurocognitive profiles across the whole population. Humans don't come in a one-size-fits-all neurologically similar package (neurotypical); there are natural and normal genetic variations and as a species we are neurodiverse.

Neurodivergent conditions diagnosis and labels such as ADHD and Autism can be helpful for many people to navigate society, however many people are waiting for a diagnosis or choose not to seek one. There are many people who mask their differences – particularly females – which can lead to higher levels of fatigue or lower attainment.

The challenges with regards to the built environment are that:

- Building bulletins and regulations pre-date PAS 6463 and tend to be dated in their approach to disability inclusion so new build designs may not take neurodiversity into account
- Existing buildings and spaces are challenging to adapt - there's a demand for flexibility of spaces that is hard to meet
- There are large class sizes and a lack of flexibility due to space constraints, trying to find a balance for everyone with regards to smell, acoustics and reverberation is difficult
- Lessons learned are not shared widely, with successes not talked about sufficiently to support replication
- There should be more stakeholder engagement to support developing the right space to suit the use and the users

Additional challenges can arise from: a lack of understanding of neurodiversity; differing cultural perspectives on disabilities; complexities of neurodiversity traits combined with other disabilities; and that neurodiversity terminology is still developing, common language needs to be agreed.

Three ways to embrace neurodiversity and celebrate difference:

- **Culture** – supports everyone to feel valued and respected
- **Empathy and Understanding** – this unlocks potential and can increase ability and confidence
- **Innovation and Creativity** – diverse minds and ways of thinking tackle challenges in different ways – capturing that in a learning setting offers great potential

The Built Environment

The presentation focussed on the built environment considerations with regards to designing for Neurodiversity - specifically with regards to PAS 6463 Design for the Mind – Neurodiversity and the Built Environment. The document doesn't relate specifically to education buildings rather the broad brushstroke of mainstream public and commercial buildings including education, transport, visitor venues and healthcare. Adoption of the standard is

Setting the context for neurodiversity and the built environment

currently voluntary but it is hoped that over time it will influence building regulations, national standards etc.

Whilst there are a number of sections to the document the most important areas to affect those with neurodiversity are: **Acoustics; Lighting;** and **Wayfinding.**

Our neuro cognitive profile may result in differences in: information and sensory processing; communication and interpretation; concentration and focus; attentional bias; processing sequential information and interpretation and navigation. The different ways the brain and memory works can influence how you experience the built environment.

The PAS 6463 focussed on sensory processing differences with regards to hypersensitivity and hyposensitivity.

- **Hypersensitivity** is when you are over-sensitive to things in the environment around you such as noise, light, colour and patterns. This can cause a sensory overload which effects our heart-rate and breathing
- **Hyposensitivity** – or sensory seeking – where people require additional sensory stimulation such as sensory rooms with fibre optic lights

Hypersensitivity effects 70% of the neurodivergent population so by and large PAS 6463 is around making everything calmer.

Inclusive learning environments

The environments that we want to achieve are:

- Adaptive and flexible, offering choice for educators and learners
- Places to collaborate and be busy and others for quiet and focus
- Consider the sensory comfort for everyone
- Provide places for calm and recovery
- And places or opportunity to move, pace or fidget

Summing up the focus should be on:

Clarity – create spaces that are clear and understandable by:

  - Providing advance information
  - Providing clear wayfinding
- Ensuring things are logical and make sense
- Ensure spaces are easy to interpret
- Provide spaces that feel familiar and comfortable
- And that operate as you would expect them to with no surprises
- Ensure that nothing is startling in appearance

Choice – provide choice to enable users to select the best space for their needs by:

  - Giving users the choice to dwell, visit or be
  - Providing different spaces for different activities and neurocognitive profiles
- Enabling users to make adjustments to the light, noise, glare
- Enabling users to avoid noisy and busy areas where possible with cocoon seats, or quiet nooks

Calm – provide spaces for people to recover and reset by:

  - Allocating spaces for collaboration and others for focus
- Provide dedicated small quiet rooms
- Use muted colours, biophilic patterns and natural materials
- Design acoustics carefully
- Make lighting adjustable
- Provide furniture that is soft, flexes, or is grounding
- Provide sensory stimulation- space for movement, stimming, tacility or music

> **'We don't operate in isolation from our environment physically, mentally, or emotionally. If we wanted a beautiful garden we wouldn't just have one type of flower – some like sunlight, some like shade and some like different nutrients in the soil. Why would humans be less complex than this"**
>
> Jean Hewitt, Buro Happold

Inclusive design and place-based thinking

'Inclusion is the cornerstone to help us achieve equity and excellence- in education for all of our children and young people.'

Scottish Government: Presumption of Mainstreaming 2019.

Figure 1 The Scottish Educational Context.

Figure 2 the four pillars of inclusion

Fran Foreman
Education Scotland

Fran Foreman is a Senior Education Officer within the national Inclusion Wellbeing and Equalities Team in Education Scotland with policy lead for inclusion and areas of additional support, including accessibility, dyslexia and autism. She has a range of experience supporting children, young people , families and colleagues through her roles as a teacher and an Inclusion Officer working for local authority, the Scottish Government and Education Scotland.

Fran outlined the principles of Scottish education and how that underpins a pupils rights to learn in an inclusive environment that meets their needs.

Scottish education is based on the belief that education is a human right and that all children and young people should be supported to reach their fullest potential. Children's rights and entitlements are fundamental to Scotland's approach to inclusive education and our legislative and policy framework. *Figure 1* provides an overview of the Scottish legislative and policy framework.

All children and young people in Scottish Early Learning and Childcare (ELC) settings and schools have legal entitlements to access their educational experiences. Those who experience disability, hidden or visible, have additional legal entitlements to ensure their inclusive access. The curriculum is defined as all that is planned for children and young people from early learning and childcare, through school and beyond. That totality can be planned for and experienced by learners across:

- Curriculum areas and subjects
- Interdisciplinary learning
- Ethos and life of the school
- Opportunities for personal achievement

Inclusive design that has been developed collaboratively with specialist advice from educators and partners and with adults and children who have lived experience are key to achieving a sustainable inclusive learning environment and experience. This child centred universal approach:

- Reduces stigma, distress and dysregulation
- Increases independence, achievement and attainment
- Saves educators valuable time for example: planning; preparation; and the reduction in the number of risk assessments required
- Is more cost effective, reducing the requirement for 'retro-fitting'

Children and young people who require additional support, which includes those who experience disability, face barriers to accessing their learning experiences alongside their peers. However, these barriers are not an inevitable result of their difficulties or medical conditions. The most significant disadvantages these learners experience often stem from, are the attitudinal and environmental factors. These are factors which can be changed through effective inclusive and universal design.

Ensuring establishments are inclusive and accessible is a legal entitlement for which Local Authorities are the responsible body.

In 2024 Architecture and Design Scotland engaged with Education Scotland's National Complex Needs Network (NCNN) which includes over 1000 strategic leads and practitioners working across Scotland to support children and young people with complex and profound needs. Participants were asked to share what architects need to factor into the design process to ensure inclusive and accessible learning environments.

- First and foremost it was to think about independence, dignity and rights
- Multisensory approaches

Inclusive design and place-based thinking

- Flexibility
- Wide, sensory pathways
- Lifts and toilets
- Storage
- Safety/Accessibility Balance
- Technology
- Outside environments
- Staff needs

The Four Pillars of Inclusion

Inclusive practice is important whatever the setting, whether it be within a mainstream or special school. There are four key interconnecting features of inclusion which can be used to set expectations and evaluate inclusive practice in schools and early learning and childcare settings. These are **Present, Participating, Achieving** and **Supported** . Together they support the delivery of inclusive learning environments for all children and young people that enable them to reach their full potential. Key expectation of the **Present** pillar include:

- **All children and young people should learn in environments which best meet their needs**
- **All** children and young people should be fully engaged in the life of their school, through the inclusive ethos, culture and values of the school
- **All** children and young people should receive a full time education including flexible approaches to meet their needs

Through the Additional Support for Learning Act in 2004 the term 'Special Educational Needs' (SEN) was replaced with 'Additional Support Needs' (ASN). ASN is a very broad and inclusive term and is the standard terminology used in Scotland when children and young people need more – or different support to what is normally provided in schools or early learning and childcare settings to children of the same age and stage.

A wide range of factors which may lead to some children and young people having a need for additional support. These fall broadly into the **four** interconnecting themes, supported by the surrounding wellbeing indicators and four capacities.

- Learning environment
- Family circumstances
- Disability or health need and
- Social and emotional factors

Improvements for the industry to consider and reflect upon

Local Authorities are the legal 'Responsible Body' for the implementation of legislation. For independent early learning & childcare settings & schools the Proprietor or Board of Governors are the 'Responsible Body'.

A responsible body has a wide range of legal duties which must be met, this includes the 'Anticipatory Duty' that commonly relates to building adaptations. An example that meets both the anticipatory duty, and the entitlement/needs of the child arises when educational transition planning for an individual child who has mobility needs highlights the requirement to ensure that the child has accessible access, along with their peers into, and throughout a school building. This work should take place before the child joins the school and because the original universal design approach already ensured accessible access, additional costs and building work is not required.

Meaningful consultation with children/young people/staff and families throughout.

Feedback after build completion and snagging to support future builds.

Ensure specialist staff are within the central planning team for a new build/extension.

Figure 3: Factors Giving Rise to Additional Support Needs

Lived experiences - Inverurie Community Campus

Maxine Booth
Aberdeenshire Council

Maxine Booth is a Quality Improvement Manager for Aberdeenshire Council, with a key focus on the learning environment, pushing the importance of getting learning environments right for those with additional support needs. Maxine's professional experience ranges from teaching, to becoming a SEN Co-ordinator before becoming a Headteacher in both England and then Scotland.

Maxine presented a collection of lived experiences from neurodivergent learners including an indepth case study of one participants experience, and a collation of observations and experiences via a video produced by the pupils of the 'Neurospicy Inverurie Group' at Inverurie Academy.

It is worth noting that **everyone's experience is different** and what works for one person may not work for another so we have collated the breadth of experiences under the headings below.

Lived Experiences

Noise

Can be distracting, either repetitive noises such as a clock ticking or one off unexpected noises such as disruption from people walking past the classroom.

Bells can be disruptive particularly when associated with transitions to new classrooms or time limitations on activities which can induce anxiety.

Hand dryers can be a problem in toilets because the nature and volume of the noise. One pupil preferred the open toilets "*because it is quiet in there*".

Open plan classrooms can be an issue and pupils dislike these due to noise and disruption from people walking past, and you can hear all the other classrooms.

Light

There are varying preferences for light levels, with some people preferring bright light and others preferring it dim. Light levels can impact the ability to concentrate and learn. Lighting controls and dimmer switches along with adjustable blinds are preferred.

Temperature

Can be hard for some people to define, the ability to have air flow through a classroom to easily control the temperature of comfort level is beneficial- potential benefit of Passivhaus construction.

Colour

Strong colours can dominate the space- drawing concentration away from the topic of the lesson.

Colours are essential to functional wayfinding, and defining spaces such as breakout spaces via vinyl finishes.

One participant noted an issue with a lack of colour on walls around the school- there was too much white and there should be more colour or things on the walls to break it up a bit.

Wall displays

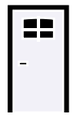
Can be too busy and overwhelming when busy or clustered, but a few well chosen displays or posters can offer helpful distraction or area of focus with the added benefit of providing learning opportunities.

Corridors

The crowded and unpredictable nature of hallways and corridors can be a negative for many neurodivergent pupils. Barriers such as doorways or passing places can disrupt transitions and increase anxiety levels.

Breakout spaces

It was noted that one participant liked the breakout spaces/ hidey spaces, but these would be better if they had doors. It is also helpful for many pupils if spaces are clearly demarcated with differing floor coverings. Having Breakout or alternative spaces is extremely important, and these should also be located close to the subject area or class they are meant for.

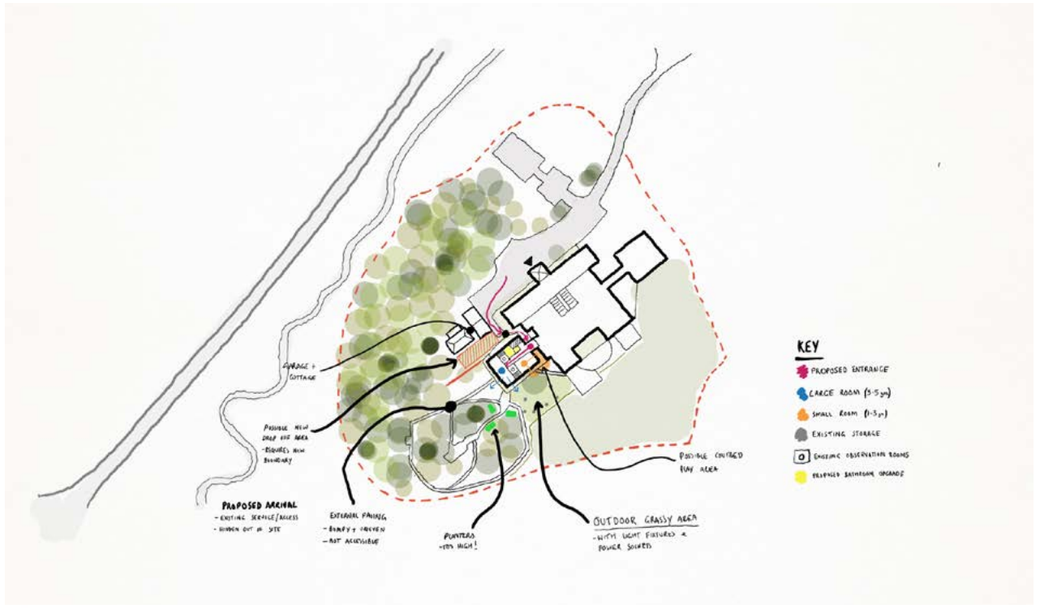


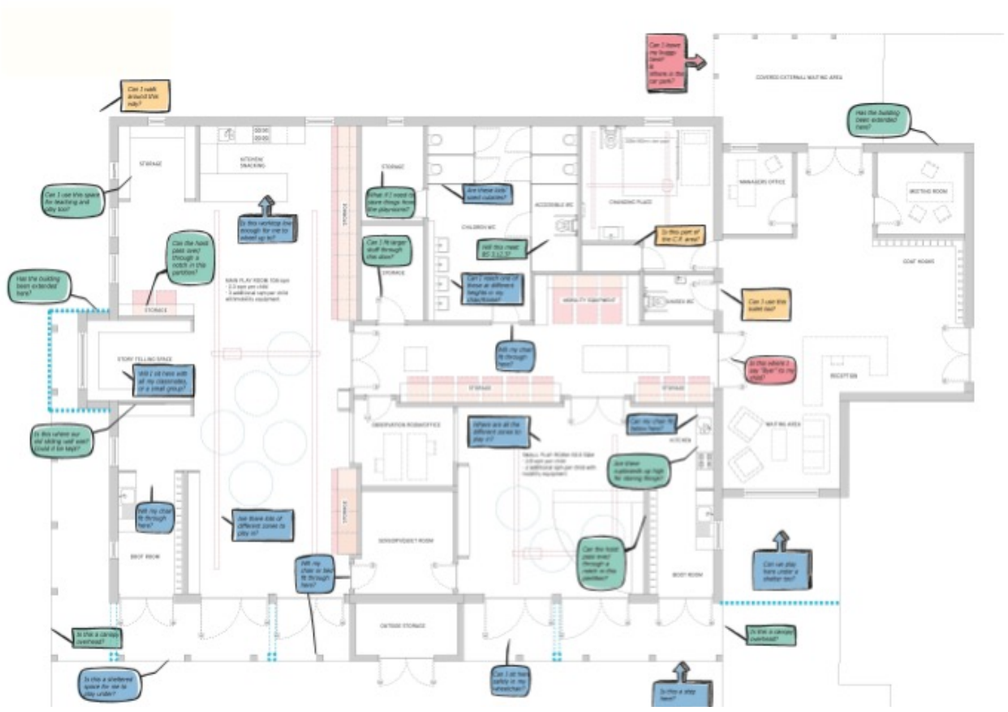
Doors

Doors or the clear demarcation of space is beneficial, however having a glazing panel in the door also helps pupils plan or know what to expect on the other side.

Enclosed classrooms and spaces are preferred because they have walls and doors as this limits distractions.

Inclusive and accessible design principles





‘The more we share our learning and the users’ voice the more we have to draw from when designing an inclusive and accessible learning estate for the future.’

Lesley Riddell Robertson Architecture and Design Scotland

Lesley Riddell Robertson Architecture and Design Scotland

Lesley Riddell Robertson is a Principal Designer at Architecture and Design Scotland with extensive experience working within the design, architecture and cultural sectors. She is a trained facilitator with a specific interest in developing community engagement and capacity building in relation to placemaking. Her main focus at A&DS is leading support for the learning estate, community empowerment, evaluation, skills development and learning resources.

Lesley introduced the Inclusive and accessible learning environments resource, sharing its development through supporting the briefing process for the Craighalbert Centre - an inclusive early learning setting.

The Craighalbert Centre

In 2023 A&DS worked with the Craighalbert Centre, a national centre for children with motor impairments, to help shape their mission to create an inclusive, integrated nursery environment where children can learn and play in shared spaces regardless of whether they have profound and multiple learning disabilities or more typical support needs.

The idea was that Craighalbert could be used as a showcase to illustrate what types of changes would be needed in mainstream nurseries to allow them to be more accessible and inclusive to a wider group of children. The centre was to cater for up to 55 children including 8 with complex disabilities.

The framework of this project was based around the development of a feasibility study to test ideas, explore options, and generate useful deliverables. Fraser Livingstone Architects led the design team which included accessible design specialist Thea McMillan, Rankin Fraser Landscape Architects and Carbon Futures consultants.

As part of the feasibility research there was a period of integrated consultations, observations, and visits to see how a nursery adapted its playrooms to support a child with disabilities and additional support needs. Further adding to the research, we built on these observations to give wider context by also interviewing practioners, specialised Occupational Therapists and Physiotherapists, with years of experience supporting children with complex needs.

Throughout the process the A&DS team would run reflective sessions with the Craighalbert team to interrogate the plans and ensure all reflections and comments were captured to inform the design development, this ensured a rigorous evaluation and testing throughout the process. Any feedback was then captured from the users by annotating the plans,ensuring the users’ voice was central to any changes made.

To broaden learning beyond the early years theme the work built on the users’ perspective. In partnership with Education Scotland we designed and delivered a facilitated workshop for members of their National Complex Needs Network (NCNN). Members of this network support learners with the most complex needs, some in specialist settings that have been designed to suit and adapt to their needs, others in classrooms in mainstream settings with few specialist adaptations. They have lived experience of the adaptations needed to meet the needs of their pupils and many have been involved in co-designing schools and refits of these settings.

Sharing the Learning

Some of the learning captured from the workshop emphasised that when embarking on a new facility, it is important to :

Inclusive and accessible design principles

- Have meaningful engagement with stakeholders, including children and young people during the design and build process
- Ensure the building environment is safe and does not require ongoing support and risk assessment to be in place
- Ensure the design:
  - Is one that ensures everyone can access what they need, when they need it, as independently as possible, to empower them to be the best they can be
  - Takes cognisance of a range of sensory needs for example lighting, materials, aesthetics, breakout spaces safe spaces
  - Has inbuilt flexibility to enable adaptations in response to IT requirements, dynamic risk assessments and ever-changing needs

By aligning these processes with design approaches and principles they could be adopted at early briefing stages to give better opportunities to create more inclusive and accessible spaces across the whole learning estate and not just for ASN provision.

Seven Key Principles for inclusive and accessible design

The key principles have seven key considerations when thinking about building or adapting a learning environment. These principles are not intended to be used as a definitive list or set of solutions. They outline important concepts to consider when planning and developing learning environments, with the aim to being more inclusive and accessible.

1. Think how people, parts and services can work together

2. Define what you mean by 'inclusive' and 'accessible' in your project

3. Build a brief around the needs of the community

4. Explore and research examples

5. Futureproof and create flexibility

6. Small changes can have big impacts

7. Remember the bigger policy picture as you plan for your project

The Understanding Barriers for inclusive and accessible learning environments document collates the findings from the collaborative workshops with the National Complex Needs Network.

Spatial Ideas for inclusive and accessible learning environment resource

This resource shares ways design can help create safe and supported spaces to meet the needs of all pupils and includes:

Inclusive and accessible design ideas for learning spaces: Video animations (right)

This series of six video animations consider scenarios in educational settings- highlighting points for design considerations. These are organised into different areas such as arrival, or needs like quiet and rest time. These insights can help in the design of better spaces, and also how to plan better how to use and teach in them.

User experience informs better design: scenarios of A day in the Life

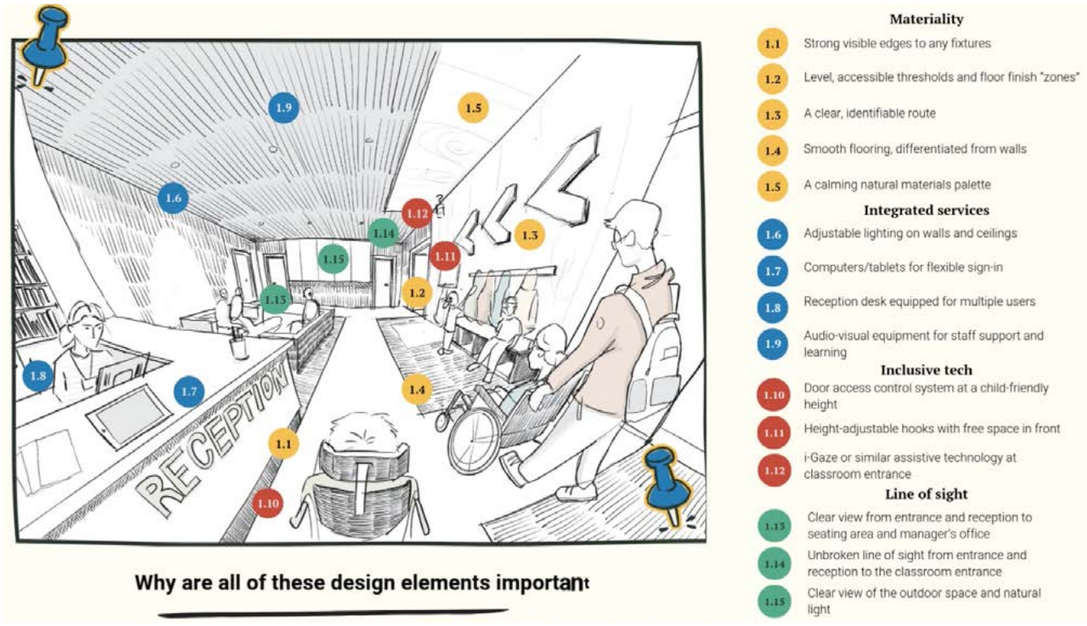
Inclusive design consultant, Thea McMillan developed a Compare and Contrast document to capture how user experience informs better design. In this resouce there is a 'day in the life' of two personas, Ruaridh who uses a wheelchair and Ailsa who requires no additional support. This highlights how some simple tasks represent barriers and decisions for others. By presenting this clearly this enables designers to make more holistic decisions.

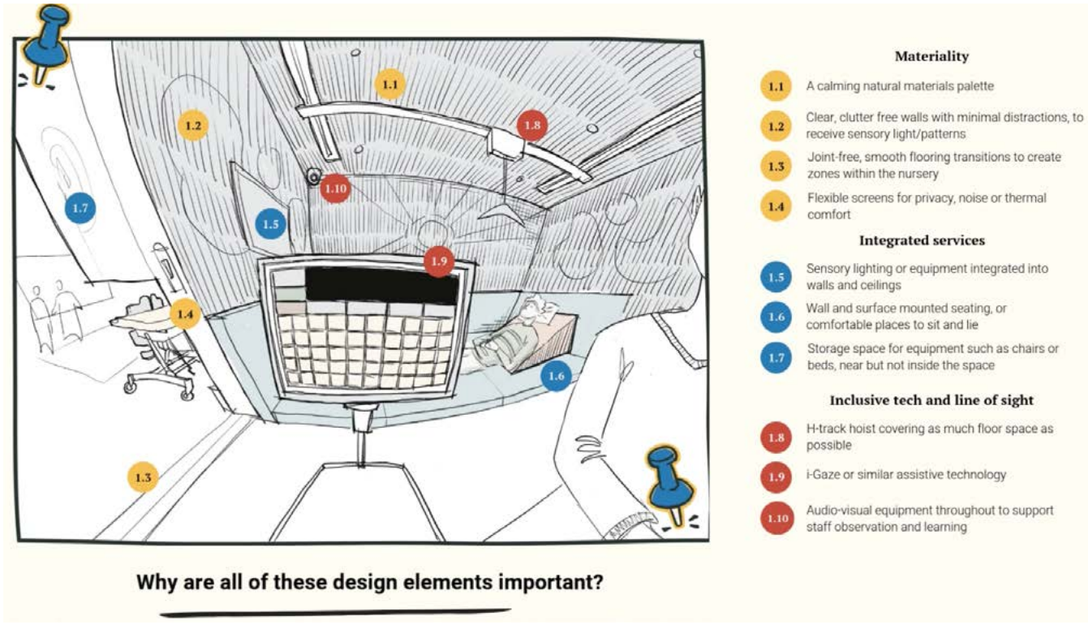
Pattern language exploring spatial ideas for inclusive and accessible design

Each section looks at design scenarios and is supported with images for inspiration. These cover: colour, texture, space, materiality, access, outdoors and play.

To view the resource you can visit ads.org.uk

Click the images below to visit the relevant video animation





Design for the mind - Neurodiversity and the built environment - PAS 6463

Jean Hewitt

Buro Happold

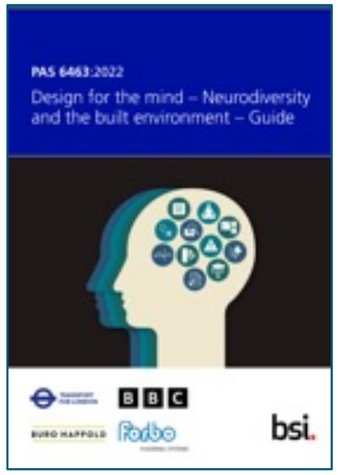
Jean Hewitt is one of the leading practitioners in the field of Inclusive Design, having specialised in inclusive environments and accessibility since 2001. A longstanding member of the BSI Committee "Design of an Accessible and Inclusive Environment", Jean represents the Institute of Workplace and Facilities Management and several disability charities and is technical author for PAS 6463: "Design for the Mind – Neurodiversity and the Built Environment". She is an active member of the Access Association and has been an accredited member of the National Register of Access Consultants since 2003.

Jean gave an overview of PAS 6363: Design for the mind, focussing on design elements most relevant to educational settings.

PAS 6463 Design for the mind – Neurodiversity and the built environment is a publicly available specification. It took two years to develop and was reviewed via public consultation which garnered around 4000 comments.

- **Who is it for?** : PAS 6463 was aimed at the target audiences of: architects and designers, planners, facility operators, decision-makers, employers and Occupational Therapists.
- **Where does it cover?**: it covers external and internal mainstream environments and content is relevant to most building types.
- **What does it cover?** : It covers both design and building and activity management and does not conflict with any other British Standard.
- **Why should we use it?** : because it benefits everyone.

The focus of the document is on removing harm – particularly for hypersensitivity which represents 70% of people diagnosed with neurodivergent conditions.



A sensory overload can affect the heart rate, breathing, blood pressure, cause confusion, anxiety and mental distress.

In Summary

The three main objectives of the PAS are to provide **Clarity, Choice and Calm.**

Since the PAS has been published it has been cited in a number of other publications and pieces of guidance including: RIBA Inclusive Design Overlay and the AUDE guide for Higher Education.

Implementation

PAS 6463 is not at all prescriptive or mandatory and even the smallest change can make a difference. It is full of considerations about giving choice and variety as there will never be a one-size-fits-all solution that works for everyone.

An Overview of PAS 6463

4 Developing the Brief

This section is mainly relevant for new-build projects and includes the benefitsof engagement with users when making changes, and has a table to show how neurodiversity can be considered at each RIBA stage.

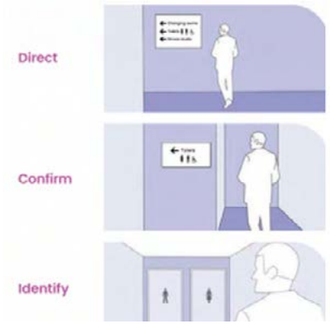
5 Site and Building Layout

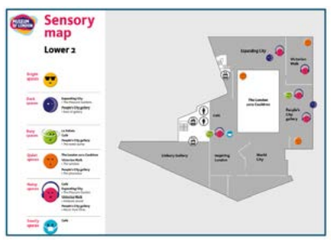
- Façade – The appearance of the façade and use of pattern can cause visual confusion and cause dizziness
- Orientation - this is important with regards to light levels, and solar glare and need for shading
- Windows and sightlines- it can be helpful to see out of windows towards nature, but for distracting views it might be better to have higher level windows for light rather than a view

6 Wayfinding

People with neurodivergent conditions can have differences in how they wayfind and navigate spaces.

- Layouts should be as logical as possible and layout changes can be disorientating, so it is beneficial if there is either some advance information, or a preview into the next space by way of viewing panel
- Identify key facilities that everyone needs clearly- such as toilets, assistance rooms, quiet rooms.
- Ensure signs are at a height that enables users to read them without looking up
- Use of colour and shape are important
- Signage - use the same graphic and colour standards for signs throughout the building on long routes. Ensure there are confirmatory signs to reinforce that people are on the right route
- Sensory mapping can be helpful in settings like museums to let people know where things will be noisy busy or quiet ahead of time. This can support pupils in their transitions to a new school or learning environment





Design for the Mind - Neurodiversity and the built environment - PAS 6463

7 External spaces and access to nature

- Planting and views out to nature can have a calming influence
- Natural materials like timber are therapeutic to touch, and can give sensory feedback when walked on, this should still be all level to support other accessibility needs
- Sounds from nature can support better concentration and cognitive processing.
- Maximim benefit can be derived from combined external views and internal features
- Loose materials such as gravel, pebbles and bark chippings should be avoided as they present difficulties for people with dyspraxia, conditions effecting balance and ambulant disabled people

8 Internal layouts

Space needs to offer different opportunities for a child to learn in different ways, children might need a space to move, or stim, or stand up. There is an opportunity to embrace falling school rolls to better use classroom space.

- The space should be familiar and clear, with no optical illusions and feel intuitive
- There should be sufficient space to allow for different types of space is key for school environments – breakout spaces, spaces for smaller groups to work, spaces for task based working and quiet spaces

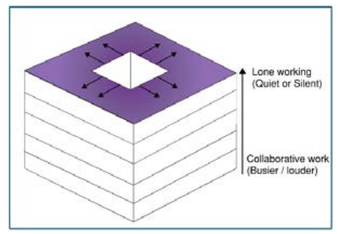
9 Mechanical, Electrical and Plumbing

- Control of air quality is important- a lot of people have hypersensitivity to odours or chemicals
- Consider cleaning products used
- Specify materials with low or no VOCs
- Plants, such as bamboo palm can remove formaldehyde smells and purge cleaning and ventilating can remove odours

10 Acoustics and noise

This was one of the bigger impact sections of the PAS 6463 as many people are sensitive to noise.

- There can be a real variation in what people are sensitive to including: continuous noise; intermittent noise; unexpected noise; high volume noise or specific frequencies of noise
- One way of supporting these sensitivities is designing with an understanding of adjacencies, ensure that the potentially noisy areas are not next to areas for quiet or concentration
- The criteria developed was based on the BB acoustics and SEN and developed further with input from acousticians



11 Lighting

- Daylight, glare and shadows all have an impact.
- Illumination ratios for comfort when transitioning between areas should be at a ratio of no greater than 1:3
- Photophobia and flicker rates can be an issue- for example in both fluorescent and LED lighting where component compatability issues arise. Lighting flicker can have impact across a large percentage of the population.
- Lighting colour temperature – warmer white light is less intrusive and less stimulating than blue light. Changing the temperature through the day from colder to warmer light would be an ideal scenario for a learning environment. Zones with different light temperatures might support providing spaces for different needs too
- In an office environment some people might self regulate with caps, or glasses or by moving space, measures which children are often not able to self advocate
- When managing sunlight and glare avoid venetian blinds as slithers of light can be disruptive to hypersensitive children and adults. It is better to have semi translucent blinds

Figure 4—1 Range of daylight colours throughout daylight hours

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12 Surface finishes

- Colours should be muted rather than vivid.
- Biophilic, i.e natural patterns are a lot less intrusive. Try to avoid stripes
- Avoid intense patterns where movement happens, for example on stairs and in corridors. Intense patterns on carpets can make it hard for eyes to process the space.
- Visual noise can cause acute fatigue, anxiety, loss of balance/ or depth perception. In a school it can be beneficial for the wall where the teacher is talking to be blank and clear of class artwork and learning materials to enable pupils to focus
- Visual noise can lead to sensory overload.

13 Fixtures, Fitting and Furniture

- Low noise options are best, such as soft closing cupboards, quiet flush toilets, and low-noise hand driers
- Use natural materials where possible
- There should be ease of operation in any fixtures and fittings specified

14 Safety and Recovery

This covers quiet and restorative spaces but also covers safer spaces for safeguarding provision. The section also talks about emergency evacuation and supporting sensory overload during this time.

The section doesn't talk specifically about sensory rooms, but does suggest that rooms designed as a quiet room can incorporate tech and materials that can be brought out for sensory seeking individuals.

14. 1 Quiet and Restorative Spaces

- There should be a private, quiet space.
- A quiet room can be small - a distinct space in a classroom or a room between classrooms
- There should be a choice of seating- things like beanbags and floor cushions for people who prefer to be grounded but an additional chair for others. There should be good acoustics
- Adjustable lighting
- Muted colours
- Limited clutter
- Typically sized to be used by just one child and one or two adults.

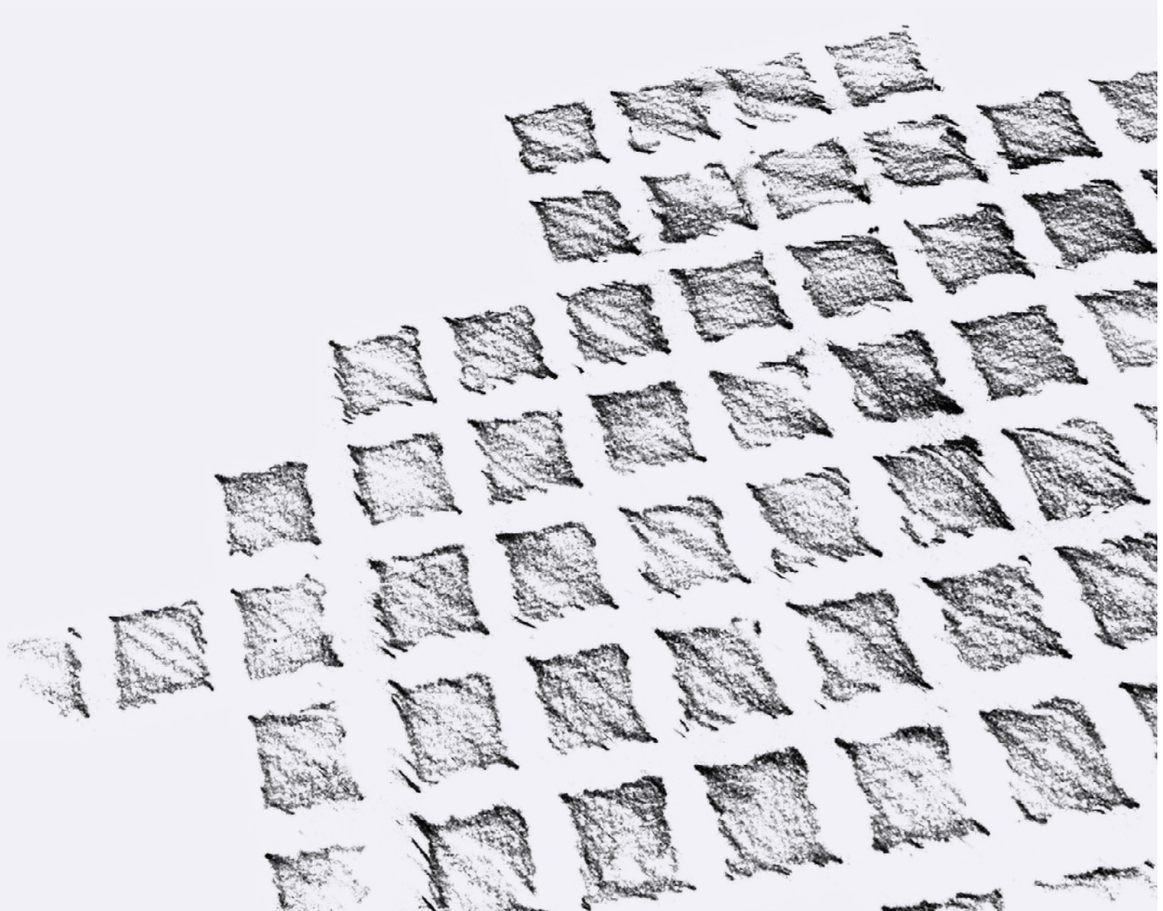
15 Environment Types

This section includes extra considerations or reading for different building uses or a specific sector including: Transport; Education; Sport and Leisure; Healthcare; Arts and Culture and Living and Sleeping Accommodation.

In General

- Temporary quiet spaces are also recommended, such as a pod or a breakoput space that can be denoted for use as a quiet space temporarily by using signage
- There should be clear quieter areas too, perhaps with cocoon seating. In schools a quiet corner with floor cushions can help too
- Sensory mapping can help people to find the right space
- There are support checklist tables in Annexe B

Further support



Next steps

As a result of the Scottish Parliament “Additional Support for Learning Inquiry 2024” Scottish Government are supporting the development of a school supplement to PAS 6463. To ensure that the development of the guidance is informed by people with a wide range of experience and knowledge, an ASL Physical Environment Guidance Steering Group has been established, with Scottish Government, Scottish Futures Trust and Architecture and Design Scotland acting as Guidance Leads. This group includes representatives of young people, teachers, charities, parents, designers, policy makers and academics. The group will assist with the scope definition, format and content of the guidance which is planned to be published by the end of 2025.

Further support

As well as a forum for Local Authorities to join together, the Shared Learning Events are designed to complement support that is available on any aspect of the LEIP, from SFT’s Learning Estate Infrastructure Team and wider stakeholders as appropriate. For relevant contacts at SFT and A&DS please see below;

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