

# Neuro-Inclusion Audit

Recommendations and Guidance



Engineering and  
Physical Sciences  
Research Council

Mark Charlesworth

# Contents

<b>Contents</b> .....	<b>1</b>
<b>Introduction</b> .....	<b>2</b>
<b>About the Neuro-Inclusion Auditor</b> .....	<b>3</b>
<b>Neurodiversity vs Neurodivergence</b> .....	<b>3</b>
<b>Neuro-Inclusion Limitations using the Social Model of Disability</b> .....	<b>4</b>
<b>Scope of this Neuro-Inclusion Audit</b> .....	<b>5</b>
<b>Key Recommendations</b> .....	<b>6</b>
<b>Common Difficulties for Neurodivergent People</b> .....	<b>10</b>
<b>Common Strengths of Neurodivergent People</b> .....	<b>11</b>
<b>Hyper/Hyposensitivity to Sensory Input</b> .....	<b>12</b>
<b>Guidance for Meetings and Events</b> .....	<b>13</b>
<b>Guidance on Meeting Venues and Building Design</b> .....	<b>17</b>
<b>ADHD - Primary Considerations for an Inclusive Meeting</b> .....	<b>23</b>
<b>Autism Spectrum - Primary Considerations for an Inclusive Meeting</b> .....	<b>23</b>
<b>Dyslexia - Primary Considerations for an Inclusive Meeting</b> .....	<b>24</b>
<b>Dyscalculia and Dysgraphia – Primary Considerations for an Inclusive Meeting</b> .....	<b>25</b>
<b>Dyspraxia - Primary Considerations for an Inclusive Meeting</b> .....	<b>26</b>
<b>Neuro-Inclusive Meeting and Event Checklist</b> .....	<b>28</b>

# Introduction

[UKRI's EDI strategy](#) sets out the ambition for an inclusive research and innovation system, with a long-term commitment to achieving this. Reshaping research and innovation so that it values and supports different people, places and projects is a significant challenge and requires coordinated and long-term focus across the sector.

This ambition includes consideration of people with neurodivergent conditions and so this neuro-inclusion audit was commissioned by [EPSRC's Equality, Diversity and Inclusion Team](#) to undertake an assessment of the processes and approaches to engagement and communication with EPSRC's stakeholders. This will ensure that EPSRC can provide a more supportive and inclusive environment for people with neurodivergence and to ultimately improve EPSRC's own practices and share learning across EPSRC, UKRI and with the research and innovation community.

No legal advice is contained within this document, and it should not be interpreted as such. All information is guidance only, based on the lived experiences as well as that obtained in the auditor's role and other research and study of the neurodivergent conditions carried out and experienced by Mark Charlesworth. The report should be read in full and with context appropriately applied throughout.

## About the Neuro-Inclusion Auditor



Mark Charlesworth has a diagnosis of ADHD, Asperger's, Epilepsy and PTSD giving additional knowledge, skills and a perfect eye for this neuro-inclusion audit.

Since 2017 Mark has been helping fellow neurodivergent people as well as organisations understand the conditions and helping them thrive with coaching, talks, training, workplace assessments and also neurodiversity audits.

This work is a passion as is helping problem solve whilst at the same time assisting others to become the best they can be, helping them to achieve their own

100%.

Having worked in a number of different industries and sectors Mark found his niche in sharing his vast knowledge of neurodivergent conditions. This path was found because he struggled to find employment, and as a sense of duty embarked on a mission to close the employment rate disparity of neurodivergent adults.

## Neurodiversity vs Neurodivergence

Everyone has a brain that is unique to them and this concept of brain differences between individuals is what we mean by the term 'neurodiversity'. In the 1990s, the term was first used to describe differences in a person's brain that are not seen as 'neurotypical', such as those diagnosed with [ADHD](#), [Autism Spectrum Condition](#),

[Dyslexia](#), [Dyscalculia](#), [Dysgraphia](#), [Dyspraxia](#). However, we now use the terms ‘neurodivergent’ and ‘neurodivergence’ to describe people whose neurological conditions mean they do not consider themselves to be neurotypical.

The term ‘neurotypical’ refers to people whose brain functions and ways of processing information are seen to be standard. Some people do still refer to themselves as neurodiverse, but the term neurodiversity is mostly now used to refer to a group which encompasses the full spectrum of brain differences and is made up of both neurodivergent and neurotypical individuals.

This neuro-inclusion audit focused on the neurodivergent conditions named above, which it is estimated that 20% of the population have a single or multiple presentation of, although many do not have an official diagnosis.

## Neuro-Inclusion Limitations using the Social Model of Disability

The Social Model of Disability describes people as being disabled by barriers in society not by their condition. The social model aims for 100% inclusion, but it can only be reached by knowing an individual and fine tuning all needed adjustments.

A neurodivergent person may have a single condition on its own or present with two or more co-occurring conditions including ADHD, Autism Spectrum Condition (ASC), Dyslexia, Dyscalculia, Dysgraphia and Dyspraxia. Whilst there are core elements to each neurodiverse condition, a person will present differently to their peer with the same condition. This is particularly true with sensitivity to sensory input, e.g. a person may be sensitive to light but someone else with the same condition is not. Additionally, where a person has a combination of conditions such as ADHD and ASC, sometimes the ADHD is more pronounced in a particular setting than ASC and vice versa. It is therefore only

through separate conversations with neurodivergent individuals that you can then fine tune adjustments for full neuro-inclusion.

## Scope of this Neuro-Inclusion Audit

Four different community engagement workshops at four different venues were observed by the auditor as well as the presentational material for those workshops. Additionally, two virtual strategic advisory meetings were attended to ascertain the elements that are neuro-inclusive and those that impair neuro-inclusion.

The goal of the audit was to establish what the barriers might be for neurodivergent people attending the meetings, as well as highlighting what is being done well so these can be amended or replicated as appropriate. No internal (to EPSRC) documents have been audited, only those elements that a delegate would experience and engage with including workshop registration forms, web links and associated documents, presentation slides including agendas and guidance have been observed, scored and recommendations given. The auditor believed that it was important that the context was key to the neuro-inclusion audit, such as the delegates being people, primarily academic and industry scientists and engineers from the research and innovation sector, as well as it being a new environment for each person. Additionally, this context also considered the process of asking for feedback, as this is something that can sometimes be difficult for some neurodivergent individuals. The familiarity of an environment or situation was important to the application of findings, score and recommendations.

This neuro-inclusion audit supports the activities that EPSRC is working towards, specifically within the [EPSRC EDI action plan](#) and action set 5: “Investigating the barriers to greater access and participation to provide better support for people in our community”.

# Key Recommendations

Whilst everybody prefers different communication types and learning styles, this might change from being a choice to a necessity for a person with neurodivergence. It may be tailoring a current approach or designing something new, but on most occasions if you ask the neurodivergent delegates what their needs are they will talk with you. Having these conversations will enable you to make adaptations that ultimately bring about a more inclusive environment that benefits everyone.

The following is a list of key recommendations as identified by the auditor. Some of these are looked at in further detail as discussed later in the guidance sections of this document.

- Before writing any document or PowerPoint presentation you will need to ensure that it follows the Dyslexia friendly formula for spacing, font type & style (see here: [Dyslexia friendly style guide - British Dyslexia Association \(bdadyslexia.org.uk\)](https://www.bdadyslexia.org.uk/dyslexia-friendly-style-guide))
- You will need to consider that other neurodivergent people may also have difficulty with larger amounts of text, so always ensure essential information items are prominent and that sentences and paragraphs are short and well-spaced out. White space gives the impression of less clutter and reduces the overbearing nature of any document.
- Full neuro-inclusion can only occur when people have the confidence to share their conditions and needs. It is therefore recommended that attendees are encouraged and invited to share these details throughout the day.  
Neurodivergent people need multiple invites as well as confidence that their information will be treated with positivity and confidentiality.



- Present an agenda to delegates before the event, including a summary of actions and expectations. Information on changes of rooms and buildings etc, as well as providing room layout information will help reduce anxiety and increase engagement.
- Bring along alternative formats of information (e.g. a video introduction, slideshow of images, audio file etc). Ensure there is a printable version of all required information for those that need it.
- Repeat the agenda throughout the day and include a line to explain each section.
- Consider the size of the room needed for your event. It should not be too small not have excess empty space.
- If possible, provide an alternative room for a quiet space that is always available throughout the day should anyone need to step away for a break to decompress. This room should be an enclosed separate room/space away from the meeting room, and of course signposted. It's presence and availability need to be introduced in pre-event documents and on the day.
- When booking rooms on floors with floor to ceiling windows, or with any large vertical drop visible, you should ensure these can be screened off, where possible, to remove the impairment of psychological distress.
- Provide clear directions and signposting to the room booked for the event. Provide a pdf map with directions before the event and have a few ready printed on the day.
- Book rooms where the lighting and temperature can be altered (e.g. dimmer switches, blinds, air conditioning, windows that can open).



- Ensure, where possible, the meeting room does not have bright colour treatments on walls and furniture, or in glass partitions to prevent glares and reflections that can cause visual disturbances.
- When asking people to engage in separate discussions or break outs, ensure that each group is given its own separate room/space where possible. This will eliminate any distraction or anxiety as well as improve engagement.
- Provide notepads and pens for everyone and offer pens with different thickness of shafts.
- Different learning styles must be considered when serving information, whether that be through a video, audio file, a talk, puzzle solving activity etc, so that all get to engage.
- It is essential that when each speaker delivers, the rate of speech not only sounds natural to them, but it must be at a rate that neurodivergent delegates are able to separate each word, process, and move onto the next. The target speed is two words per second, but not faster. For example, in no less than four seconds recite the following phrase 'The quick brown fox jumped over the lazy dog'. It must not be ideally longer than two words per second, nor shorter, but equally avoidance of staccato style which would cause difficulties for many neurodivergent people.
- In a PowerPoint presentation ensure that the subject title, phrase, or header is on each slide, and that each slide has clear differentiation from the previous.
- Ideally, water should be provided on each table and available throughout the day.
- Food options should include a variety of textures, tastes and temperature ranges where possible.

- When answering or asking a question, the speaker should consider repeating and speaking in a way to confirm their understanding and to break down the question or answer.
- During a presentation or discussion session it is essential that before moving on to the next slide or section that clarity has been achieved of what has just been delivered. Once a summary has been served, then ask delegates 'raise your hand if you need me to clarify something'.

# Common Difficulties for Neurodivergent People

Whilst there are multiple presentations of the same condition, each person will experience and present differently from the next, albeit with core difficulties and strengths, each to a different degree. Whilst lots of people have one condition, many have two or more.

Common difficulties are:

- Queuing and Waiting
- Sensory Matters
- Difficulty sleeping
- Anxiety
- Emotions and wellbeing
- Working memory and attention
- Confidence and low self esteem
- Learning and hindsight, reliant on working memory
- Burnout and being overwhelmed
- Planning and organising
- Deadlines, willing but may struggle
- Avoidance of activities where they have a difficulty
- Sole focus activities, need to concentrate on task at hand
- Off the cuff questions and demand for a very full and detailed answers
- Underplaying of conditions and being people pleasers
- ['Frontal Lobe Paradox'](#) – where an individual can perform well in an interview or test setting, despite marked impairments in everyday activities

# Common Strengths of Neurodivergent People

A neurodivergent person's strengths depends on their combination of conditions, and of course how it presents in that individual, which is different to their other neurodivergent peers.

Common strengths are:

- Creative and strategic thinkers, always finding new ways to solve problems, in very efficient ways.
- A great ability to think visually
- Love of words
- Originality
- Seeing the big picture
- Excellent pattern spotting skills, and abilities to find inconsistencies
- Great long-term memories
- Entrepreneurial mindset
- Sociable, caring, and empathetic

# Hyper/Hyposensitivity to Sensory Input

Sensory input can be psychologically distressing for neurodivergent people when highly sensitive to a certain element. In some cases, this can lead to hyposensitivity to other aspects of the environment such as temperature or being able to assess risk which can be dangerous. Such sensory inputs can include:

- Sight, including reflection, movement, lighting levels
- Sound, including voices, echo, volume, machines
- Olfactory, including cold food, cleaning chemicals, perfumes,
- Touch including furniture, handles, texture of food, clothing, pens
- Taste
- Balance & coordination

# Guidance for Meetings and Events

The following guidance discusses the key aspects of meetings and events that could have a negative impact on neurodivergent people and some of the considerations and adjustments that can be taken to ensure neuro-inclusion.

## Clarity of Expectations

Being able to fully engage during any meeting or event is dependent upon knowing what is expected of you. Clarity is essential in all elements of the event, including signing up for it, any associated documents, and the aims and activities. As mentioned in the recommendations, it is advisable to repeat the meeting objectives throughout the day to ensure that neurodivergent people have a full understanding. It is advisable to provide key information such as the agenda and objective both on a printout given to each person, as well as on a screen overhead. With clarity a neurodivergent person will feel fully included and able to contribute towards the aims and outcomes.

## Introductions and Name Badges

Whilst some neurodivergent people may have anxiety induced because of introductions, some will find that anxiety is eased. It is essential that name badges or lanyards are offered, ensuring that the name can be read from a few feet away (i.e., use large bold sans serif font following the [Dyslexia formula](#)).

## Reading Material

Written documents and presentation slides should be short and to the point, with plenty of spacing between different sections to ensure easy reading. During a presentation, slides should be there to emphasise what is being verbally delivered, not a verbatim copy. Neurodivergent people can be easily distracted if there is lots of text on a slide

and not able to concentrate on what is being said. Pictures, videos, and clear graphics are useful to enhance a person's learning in the session and will emphasize key points. Repetition, summaries, and clear differentiation will enhance the engagement and learning for neurodivergent people. As mentioned previously, ensure each slide has a title on each page and has differentiation from the next. Text needs to be formatted using the [Dyslexia friendly formula](#) and also using language without nuance and need for translation. Ensure that both a digital copy and physical copy of documents are provided. A physical copy of slides and other documents will allow some neurodivergent people to engage in more depth and contribute to a greater degree. Digital copies are great for screen readers so that those with conditions such as Dyslexia can engage more easily.

## **Registration Forms**

Some neurodivergent people might have difficulty with answering open-ended questions, so it is best to use specific closed questions. It is important to remember that, although not all, some on the Autistic Spectrum have a literal interpretation of language so the questions need to avoid nuance.

## **Writing**

Always ensure that you offer a copy of slides and documents so that an individual doesn't feel required to take their own written notes. Note taking however can be beneficial for some neurodivergent people to help them keep their focus. It is therefore important to provide enough space for any note taking, as well as paper and different types of pens.



## **Session Pace and Flow**

Neurodivergent people will often need additional time for any activity in comparison to their neurotypical peers, in order to be able to fully process the information and situation. Providing enough stimulation is another aspect that is important for focus and engagement, particularly for people with ADHD for example. This is best done by giving one element of focus as well as ensuring that there is an activity for the brain such as problem solving. Again, repetition and taking time to explain is important to emphasise information.

## **Speakers and Facilitators**

As mentioned in the recommendations, it is essential that when each speaker delivers, the rate of speech not only sounds natural to them but is at a rate that neurodivergent people are able to separate each word, process, and move onto the next. The target speed is two words per second, but not faster. It must not be ideally longer than two words per second, nor shorter, but equally avoidance of staccato style which would cause difficulties for many neurodivergent people.

## **Providing a Safe Space**

Trust is the significant factor in encouraging neurodivergent people to share information about their condition and of course any subsequent requirements for adjustments. Neurodivergent people often underplay their needs and difficulties without realising it, so there needs to be a repetition of the invitation to share this information before and during the event, with the assurance that anything disclosed will be kept confidential and only used for the purpose of improving inclusion.

## **Discussion Sessions**

Discussion sessions, such as group feedback and roundtables can sometimes benefit people who are more confident to speak up and who might dominate a session. This in turn discourages quieter individuals from having their say, especially as neurodivergent people often lack in confidence. It is therefore important that the meeting facilitator(s) ensure that all within the group have had an opportunity to contribute to the discussion. To ensure neuro-inclusion the facilitators should provide a repetition and summary of the question(s) or answer(s) given to ensure that the key point is understood by everyone. The facilitators should also ensure everyone who wants to contribute has an opportunity to do so. This might involve the use of different forms of input - vocal - in both larger and smaller groups, as well as the use of written (e.g., post its on flip charts or messages in electronic chat functions).

## **Breaks and Refreshments**

The brain needs time to process what has been received whilst not being overwhelmed so it is important that there is a short break each hour, even for just 5 minutes. This places a metaphorical full stop on the previous session, psychologically clearing the way for new input. This places a metaphorical full stop on the previous session, psychologically clearing the way for new input. People with ADHD may require shorter sessions than others, but it is important for everyone to have regular breaks. As well as the scheduled breaks in the agenda, it is important that anyone should feel they can step out of the meeting at any time should they feel the need. Having an extra space or room available to go to for a rest or some quiet time throughout the day is also advisable.

## **Virtual Meetings**

Virtual meetings, including hybrid meetings are becoming more common, using zoom and other video conference software. The meeting facilitators will need to consider the person grid layout on the video call and how the software works, inviting people to turn off their video screens if helpful. Information about how the software works should be provided to attendees beforehand in case they haven't used it before. Some key considerations include ensuring that people have a plain background (e.g. blurred or sat against a plain wall) to avoid distractions, ensuring that closed captions are provided live during the meeting and that copies of any documents or slides are sent to attendees to look at separately.

## Guidance on Meeting Venues and Building Design

As well considering the organisation and structure of the meeting/event itself, the meeting venue and building design should also be looked at. The following discusses some of the key considerations to take to reduce any difficulties for neurodivergent people.

### Room Layout

The ideal room and layout depend on the purpose of the meeting but the main thing to consider is accessibility. It must be easy for people to have easy access in and around the room and to be able to leave easily without fuss if they need to. It is advised that rows of seating have an aisle located down the middle and that any area of empty seating or space is screened off to avoid distraction. Having circular tables is good for encouraging discussions. You should provide details of the room layout in advance of the meeting, which might include some photographs and can be used to ask if anyone has any issues with the set up.

Some neurodivergent people can become overwhelmed by the ambience of a room, its features, and the size of the space, but these are things that can be easily resolved. In a large, open space, some neurodivergent people feel a bit lost and unsure, whereas if a room is too small for the use or furniture then it creates a feel of being overwhelmed and trapped. Consider a room that has enough space to fill the seating area but with some extra space for a chance to step away and take a break from the meeting discussion if needed.

## **Thermal Comfort**

Although anyone can feel uncomfortable and distracted by the temperature setting of the room during a meeting, some people with neurodivergence may find this particularly distressing and unable to perform at their best. The temperature of the room should be monitored and controlled throughout the day, in case any adjustments are needed (e.g. air conditioning, heating, windows).

## **Visual Distractions and Stressors**

Sunlight is a beautiful thing, but can cause distraction and discomfort by inducing glare, reflection, and increased temperature. There might be distractions through the windows too, from the outside world. It is advisable to book a room with windows and vertical blinds that can be closed and opened. These vertical blinds are better than the 'all-or-nothing' roller blinds because of a greater flexibility and directional control.

Strip lighting has the potential to flicker, which can cause distress and headaches for people who are neurodivergent. The temperature of the bulb as well as the luminance needs to be considered too. Pure white or blue tinted lights can cause sensory overload. Therefore, it is advisable to use lighting which has a warmer temperature. Reflection

and glare occur on white surfaces and certain wall and floor coverings in addition to the reflection on screens and whiteboards. It is advisable that these surfaces are hidden when not in use or moved so they don't reflect or glare. In many cases a replacement material or item is the perfect solution, and you can also install dimmer light switches.

## **Sound**

Background noise can be distracting for many divergent people, so steps should be taken to reduce this where possible. For example, the hum of machines (e.g., printers, photocopiers) may cause a sensory overload, it is best that they are put in their own room away from people. Sound absorption fittings and furniture should be explored as well as ensuring that sounds are not travelling through one room into the next. Quiet zones and quiet pods are appealing to many neurodivergent people when they need a workspace to sit down and focus.

## **Other Sensory Stressors**

These include olfactory and tactile distractions, which although can't be fully controlled or avoided in any given environment, there are some key considerations that can help to reduce their affects. Having extractor fans in kitchens for example can help with food odours, and auto-closing doors will help here too. Ventilation is an important consideration throughout any working environment, but especially in areas where food is prepared.

With regards to tactile stressors, some textures can cause distress whilst others can be a comfort, but this is individual to the person. It is therefore advisable to offer a choice of furniture materials to sit on, including a throw to use. Door handles, handrails and buttons are likely more difficult to provide a variety of. It would be beneficial however, to consider providing alternative options throughout the building, for example having a metal handrail on one-side and an alternative material such as wood on the other.

## **Open Plan Areas**

Working in an open plan office setting can be particularly distressing for people with neurodivergence due to the overwhelming nature of 'being on show' and increased chance of distraction from being interrupted and hearing various conversations and other noises in the environment going on at once. The open plan environment has been found to be less inclusive and less productive than their counterparts and needs to be separated into suitable units. There should be the option of a separate quiet space or room for neurodivergent people to use to relax and decompress in case they experience sensory overload or burn out. This room should be made available throughout the day and not used for any other purpose. It should be positioned close to the main meeting room, so that it can be easily accessed by those who might need it. The purpose of this room is for neurodivergent people (amongst others) to avoid the noise, people, aromas, lighting, workload etc which they are trying to spend time away from and so this room must be designed with this in-mind. General group break rooms do not meet the criteria required for a quiet safe space.

## **Balance and Coordination**

Some neurodivergent people need to ensure they have a clear path to navigate their way across a room or building. It is advisable to place a variety of items along the route so that they can hold onto these objects, maybe a desk or shelving system (firmly screwed down), to help them feel grounded. Providing seating options at regular intervals throughout the building is advisable to cater for the needs of anyone with a mobility impairment.

The thickness of the flooring should ideally be as thin as possible, whilst being able to absorb the noise caused by people's footsteps and movements. Patterns on the floor

should be avoided as does a colour contrast between two carpet tiles, because this can cause disorientation and provide a sensory balance issue. A sense of distance and proximity needs to be maintained across the navigation.

## **Colour, Patterns, and Layout**

Although certain colours might seem pleasing to the eye for some, they can be distracting for some neurodivergent people. Calming and neutral colours that blend with the rest of the room are usually better than bright colours.

The same can be said of stripes and patterns. For example, many patterns appear to contain faces to Autistic people, which might not be seen by neurotypical individuals. Patterns like this can be distressing as well as distracting. Where overpowering and distracting elements cause difficulties for neurodivergent people, the patterns in a room need to be covered up. For example, a row of cupboards with 3 different coloured doors in a chequered layout need to have the doors swapped around to remove the distracting element.

## **Posters and Signage**

When there are too many signs, posters, and other visuals to read in a room, they can be easily missed. These should be clearly ‘framed’ by clear space and by using a visible and accessible font format which is easy to read. On all temporary signs place a date of issue and expiry date so that it is clear they are relevant, and always check that they are to avoid any confusion. All elements need to have clarity without nuance, ensuring you give a clear instruction rather than a capability question. e.g. when the lift is broken don’t say “can you use the stairs”, say instead “lift broken, please use the stairs”. All written elements must have a high contrast between text and background and be a sans font.

From the outside of the building, it needs to be clear what the building is for and to which organisation it relates to. There needs to be a clear, accessible entrance, as well



as signs and directions within the building to different rooms/areas. It's a good idea to repeat locations and directions within different areas of the building throughout the day.

## **Flooring**

There is an increased noise level from hard flooring in comparison to a carpeted floor. Additionally, the greater the thickness of the pile (despite being more noise absorbent) could cause balance issues for some neurodivergent people. Patterned carpets/rugs should be avoided, if possible, as should bright blocks of colour because this may cause balance and co-ordination issues. Bright colours may also cause a sensory distraction so should ideally be hidden from view in areas where conversations and other means of concentration and focus occur.

## ADHD - Primary Considerations for an Inclusive Meeting

**ADHD defined:** There are three types of ADHD. The first being impulsive or hyperactive, the second being inattentive, whilst the third is a combination of the two types. The ADHD model relates to six areas which all experience, Activation, Effort, Focus, Working Memory, Emotion and Action.

ADHDers have a difficulty with working memory, despite a high intelligence, so reminders and summaries are essential throughout the workshop. Reading large volumes of text can also be difficult. Whilst shifting focus and sustaining focus is an area of struggle, so is tuning out distractions. Multitasking such as listening and making notes at the same time can therefore be difficult for some ADHDers who will only be able to do one not both. Space and time should be given, with repetition and emphasis of information. Staying focussed and alert is not easy for a person with ADHD and so 'shorter sprints' rather than 'longer marathons' are much more efficient. ADHDers can have difficulty engaging with topics that don't instantly interest them, or when they are not entertained or challenged enough.

## Autism Spectrum - Primary Considerations for an Inclusive Meeting

**Autism Spectrum defined:** Characterised by persistent deficits in social communication and social interaction across multiple contexts, including deficits in social reciprocity, non-verbal communicative behaviour used for social interaction, and skills in developing, maintaining, and understanding relationships. Also present are repetitive or restricted behaviours or interests, or activities.

Some people on the Autism Spectrum can be focussed on detail and are never satisfied that 100% has been reached so will, as people pleasers, keep amending or changing until satisfied. They can therefore have a need to be kept on track by being given positive feedback on their content. Additionally, there is a need to give a framework and context of the session as well as outcomes, particularly including any actions required of an attendee on the Autism Spectrum. Changes are okay but sudden or very short notice changes or requests can be disruptive, so always give plenty of notice of, for example, the need to separate in to groups. Anxiety is induced usually by the unknown so always give as much information, including who else is in the session.

## Dyslexia - Primary Considerations for an Inclusive Meeting

**Dyslexia defined:** A difficulty that affects the skills used for accurate and fluent word reading and spelling, and comprehension.

Verbal repetition of the significant information is essential to help those with Dyslexia who have difficulty with short term memory and holding things in mind. Always have a digital version of more than just slides such as processes and instructions so that a screen reader or app can be used for reminders as the process is followed, or by audio instruction. Those with Dyslexia have a difficulty following multiple steps and instructions when given at the same time, so always ensure you separate these so the person can use them productively and achieve the goal of the process. Using symbols etc in place of words quickly helps a person with Dyslexia comprehend and translate meaning. Despite good intelligence it will be difficult to express thoughts onto a blank sheet, so always provide printed sheets with a heading of the question to be answered. Effort with reading is difficult so these actions should be turned into a conversation or listening to a speaker.

## Dyslexia Formula

When presenting any document or slide it is essential that it is formatted using the Dyslexia Formula to ensure full inclusion and engagement.

- High contrast and plain background
- Times New Roman and other serif fonts are unsuitable
- Suitable sans serif fonts include Ariel, Comic Sans, Verdana, Tahoma, Century Gothic, Trebuchet, Calibri, Open Sans
- Font size ideally 12 to 14pts, some people will request larger, with ideal letter spacing 35%
- Inter word spacing: 3.5 times the inter letter spacing
- Larger line spacing 1.5/150%
- Avoid underlining and italics
- Use bold for emphasis but not heavy bold
- Avoid text in capital / uppercase because it's less familiar and so harder to read
- For headings and paragraphs: use font 20% larger than the normal text and use bold for further emphasis; ensure there is extra space around them
- Ensure hyperlinks look different from headings and normal text

## Dyscalculia and Dysgraphia – Primary

### Considerations for an Inclusive Meeting

**Dyscalculia defined:** A difficulty that affects mathematical skills including number sense, memorisation of arithmetic facts, accurate or fluent calculation, accurate maths reasoning. As with Dyslexia, those with Dyscalculia have difficulty holding things in mind, which is a short-term memory difficulty. Therefore, repetition of information is vital as well as applying a learning style to improve the memory of such information. Where a person has a difficulty with the concept of size or space, quite often a comparable object can be used, particularly something that the person with Dyscalculia will relate to. Some people however, despite good intelligence, may still be unable to translate. Additionally, where

timing is essential such as a timed session or knowing when to come back from lunch, have an alarm or alert function is useful.

**Dysgraphia defined:** Where a person has a difficulty in written expression but comprehends what they wish to write. Short term memory is also difficult for those with Dysgraphia. Always supply slides and other digital information in print so that the person doesn't have to make notes. Where writing is required, it is crucial that different pen choices are offered which include different shaft thicknesses. Let delegates know in advance that writing may be required, other than note taking, so that they can organise their own equipment, or let you know, after you have asked what they need. Graph paper will help in the expression of writing, but always allow a person to type if they need to. Writing speed may be slower than a neurotypical peer so additional time is required to allow a person to complete their noted sentence. When processing verbal or non-verbal information clarity is required both for served and received information.

## Dyspraxia - Primary Considerations for an Inclusive Meeting

**Dyspraxia defined:** A condition that primarily affects fine and gross motor skills, concentration, memory, and sensory input.

A person with Dyspraxia may stumble or bump into things because of spatial awareness difficulties in addition to their gross motor skills difficulties, so always have a clear path to navigate, but constantly ensure that they are able to hold onto or lean on items for stability. Allow a person with Dyspraxia to sit at the end of a row of seating so they can quickly access and leave as they need. Limit the requirement for use of fine motor skills such as door handles, cutlery, writing and more. The person with Dyspraxia will experience fatigue when using their motor skills so ensure that breaks are frequent and reduce the requirement for their use in the session.



# Neuro-Inclusive Meeting and Event Checklist

This is a guide and it is acknowledged that not all of these actions will be possible all of the time. However, it is expected that every reasonable effort should be made to accommodate adjustments to improve the inclusion of the meeting.

1	Have the facilitators ensured the venue rooms are neuro-inclusive?	
2	Have facilitators ensured that confirmation navigation signage is high contrast and visible from afar at the venue?	
3	Have the facilitators ensured they provide attendees with pens and paper for those that need them?	
4	Have the facilitators ensured that paper as well as pen choices with different shaft thickness are available?	
5	Have the facilitators asked people if they need a seat reservation before the event?	
6	Have facilitators ensured that there is a spectrum of variety with regards to thermal and texture food choices?	
7	Have facilitators arranged for water to be available for all delegates across all tables?	
8	Have facilitators ensured that food and drink is served and consumed in a different room nearby?	



9	Has a welcome pack and web link to the online version been created and made available?	
10	Does the welcome pack contain topics, questions, room layout photos, agenda, expectations, outcomes?	
11	Does the welcome pack contain access information including public transport, driving, parking?	
12	Has the welcome pack been issued in a printable format, that is available before the event and at the event for those that need it?	
13	Does the event links and welcome pack invite anyone to share details of any adjustment needs?	
14	Has a survey been issued to attendees to ask them all about any needs they may have?	
15	Does the weblink welcome pack contain headshots of all facilitators and where appropriate attendees?	
16	Do the slides have clear differentiation between each section in the slide set?	
17	Are slides available (where requested) in black and white printable format?	
18	Have case studies been used across the session where relevant to explain the context?	
19	Have all the slides and documents been formatted using the Dyslexia formula?	

21	Is a poster prominent in the room inviting delegates to share details about their neurodiversity and adaptations with the organisers?	
22	Is there plenty of notice given, including pre-event, that delegates will be asked to split into smaller groups and give feedback for example?	
23	Have all learning styles been accommodated, particularly visual and problem solving?	
24	Is there a 'welcome' sign clearly displayed at the venue?	
25	Are name badges available and readable from four feet away, by little more than a glance?	
26	Has a facilitator been allocated as official meet and greet person, in or nearby to the room entrance?	
27	Are facilitators reminding delegates through the day about the agenda, outcomes and expectations?	
28	Are the facilitators checking that all delegates have clarity on the topic before moving on?	
29	When delivering content, moving onto a new session etc, is there clear verbal and visual differentiation?	
30	During each topic, is there repetition of important points, and a summary before moving on?	
31	Have neurodiverse delegates been reassured that they are meeting expectations throughout the day?	

32	Are five-to-ten-minute breaks occurring each 45 to 60 minutes, plus a 45-minute lunch break?	
33	Are all questions that introduce new topics and sessions closed and focussed, with an absence of open questions and theory?	
34	Have the facilitators ensured at the beginning and through the day, full sensory comfort including thermal?	
35	Do facilitators know where and how to alter sensory and thermal comfort such as dimmers etc if possible?	
36	Has a facilitator been allocated to divert a neurodivergent attendee back to the topic should this be required?	
37	After the event have facilitators checked with neurodivergent attendees to understand what they experienced and either learn and improve, or repeat?	
38	Have the facilitators thanked everyone, also giving clarity to the fact that the session has ended?	
39	Have the facilitators invited follow up questions verbally and by email?	
40	Have facilitators issued any promised follow up information to neurodivergent delegates?	

# Conclusion

The auditor concludes that based upon his own experiences and observations there is no intent by EPSRC to exclude or impair neurodivergent people in anyway during meetings and events. The commissioning of this neuro-inclusion audit for a range of community engagement workshops and virtual strategic advisory meetings is evidence that EPSRC are keen to ensure that neurodivergent people are fully included, which was also apparent at each workshop and in other conversations with different EPSRC colleagues. The elements in direct control or influence of EPSRC are easily corrected in a short time frame. The results are nuanced and are from the lens of all neurodivergent presentations which can vary. Individual conversations and tailoring reasonable adjustments will ensure greater neuro-inclusion.



For more information and contact details please visit Mark Charlesworth's website: <https://www.neurotide.co.uk/>

© 2024 Mark Charlesworth. All rights reserved.