

Understanding neurodivergence at work

A guide to better understanding and supporting those with neurodivergent conditions



theiet.org/neurodiversity-in-engineering-and-technology

Understanding neurodivergence at work



We would like to say thank you to all those who helped guide and support this resource, including our IET Neurodiversity Member Network and those who took part in our anonymous case studies, which can be found at theiet.org/neurodiversity-in-engineering-and-technology



The Institution of Engineering and Technology (IET) is working to engineer a better world. We inspire, inform and influence the global engineering community, supporting technology innovation to meet the needs of society. The Institution of Engineering and Technology is registered as a Charity in England and Wales (No. 211014) and Scotland (No. SC038698). Futures Place, Kings Way, Stevenage, Hertfordshire, SG1 2UA, United Kingdom.

© The Institution of Engineering and Technology 2024

Contents

Introduction	4
Glossary	5
Attention-Deficit Hyperactivity Disorder (ADHD)	7
Autism / Autism Spectrum Disorder (ASD)	10
Dyslexia	13
Dyscalculia	16
Dysgraphia	18
Dyspraxia	20
Tourette Syndrome	22
Synaesthesia	24
Hyperlexia	24
The impact of intersectionality	25
Workplace adjustments	26
Accessibility	27
Career progression	28
Allyship	29
Neurodiversity resources	30
Supportive software	33
Reference list	34

Introduction

We surveyed the IET Volunteer community in 2022 and found that nearly one in five respondents identified as 'definitely' or 'possibly' neurodivergent. This response reflects research findings for the general population: it's estimated that 20% of people are neurodivergent in some way.

In November 2023 we released a report ¹ (Neurodiversity in engineering and technology) exploring the instance and experiences of neurodivergent engineers and technicians. Our findings revealed that there's a great deal of work to be done to improve the working environment for these valuable professionals.

Our research indicated that many of the barriers that neurodivergent individuals face in the workplace result from a lack of awareness and understanding among colleagues about neurodivergent conditions and how best to provide support. This echoes the results of a **2020 study**² by the Institute of Leadership, which found that just one in five organisations offered leaders, managers and employees training to support neuroinclusion.

This toolkit is designed to help you understand more about a number of neurodiverse conditions and how they may affect someone's ways of working. As you read through this document, you'll notice an emphasis throughout that each neurodivergent person has their own unique traits and preferred methods of support – they are an individual and should always be treated as such.

The traits mentioned within each section are identified as typical for each respective condition based on research. A neurodivergent individual may have some, all or none of the traits listed for their condition – they may also have traits that are not included in the list.

To support this toolkit, we have gathered a number of real case studies from neurodivergent engineers that detail the journey from realising support is needed to accessing and receiving this support. <u>Click here to view our case studies</u>.

Who is this toolkit for?

We've produced this toolkit for a broad audience, including:

- employers and HR professionals
- line managers and department leads
- colleagues of neurodivergent individuals
- neurodivergent individuals
- anyone who's looking to learn more about specific neurotypes and how they can affect someone at work.

Glossary

Here you will find definitions for common words or phrases that are related to neurodiversity and neurodivergence. If you see a word that is highligted within a definition below, it indicates that this word is also defined here. These words or phrases may appear throughout this toolkit, so please refer back to the glossary if you come across a term that is unfarmiliar to you.

- Body doubling: this involves completing a task with someone else in the room who may be completing the same or similar task. This approach can help some neurodiverse individuals with motivation and executive function on tasks that they've been avoiding – the presence of another person can add light pressure to remain on task or help to model focused work.
- Burnout: this is an extreme state of exhaustion, frustration and the loss of skills caused by chronic stress, overworking and/ or consistent overstimulation and masking. It can occur as part of many neurodiversities but is most commonly related to attention deficit hyperactivity disorder (ADHD) and autism or autism spectrum disorder (ASD). Individuals who experience a period of burnout may require significant time to recover their skills and wellbeing.
- Disability: the 2010 Equality Act ³ defines a disability as "a physical or mental impairment that has a 'substantial' and 'long-term' negative effect on your ability to do normal daily activities". Within the Act, neurodiversity falls under the umbrella of 'disability'. However, many neurodivergent individuals do not identify as being disabled or having a disability.
- Hyperfocus/Hyperfixation: similar to a special interest, hyperfocus (sometimes referred to as 'hyperfixation') involves intense concentration on a topic or task. However, this term is more often related to individuals with attention deficit hyperactivity disorder (ADHD). A person who is hyperfocused can complete large amounts of learning or work but may also become oblivious to external factors, including the passage of time and the actions of those around them. Hyperfocus is more likely to occur when the individual has a passion for – or keen interest in – the topic or activity at hand.

- Masking: this involves an individual hiding or suppressing some of their neurodivergent traits to 'fit in' with neurotypical behaviours and societal expectations. Examples include forcing themselves to make eye contact; socialising with others while being hyperaware of what they say or do; and hiding or suppressing tics or stimming behaviours. Masking takes conscious effort and focus, so prolonged periods of it can have a negative effect on the neurodivergent individual's wellbeing, mental health and capacity to complete tasks.
- Meltdown: this is caused by extreme and prolonged feelings of anxiety or overstimulation. Someone who is experiencing a meltdown may express their distress through crying, screaming, shouting, frustration, anger or in many other ways. Ambitious about Autism ⁴, a UK charity supporting autistic children and young people, describes meltdowns as an example of the 'fight' response, when a distressing or uncomfortable situation has caused a buildup of negative emotion or stress that can no longer be suppressed.
- Neurodivergent: in our report and this toolkit, we use the term 'neurodivergent' to describe individuals who identify as having one or more minority neurotypes. The examples included in this toolkit are attention deficit hyperactivity disorder (ADHD), autism or autism spectrum disorder (ASD), dyslexia, dyspraxia, dyscalculia, dysgraphia, hyperlexia, synaesthesia and Tourette Syndrome.
- Neurodiversity: this is the concept that "all humans vary in terms of our neurocognitive ability" (Genius Within).⁵ The term spans the full range of neurotypes, including neurotypical and neurodivergent individuals.



- Overstimulation: in relation to neurodiversity, overstimulation occurs when an individual becomes overwhelmed by external stimuli or sensory input which they are unable to process comfortably. For example, a neurodivergent individual could become overstimulated in loud or busy situations, in very bright lighting, by wearing certain materials or by smelling certain smells. Long periods of overstimulation, sometimes referred to as 'sensory overload', can lead to emotional distress and even meltdown. Stimming can sometimes help an individual to prevent overstimulation by offering a controlled sensory input or output to focus on.
- Shutdown: although this has the same triggers as a meltdown, it exhibits very differently. Whereas a meltdown gives rise to outward expressions of anxiety and distress, a shutdown causes the individual to close off and possibly lose the ability to communicate or express themselves. The Ambitious about Autism charity describes it like this: "If meltdowns are equivalent to the fight response, then shutdowns are similar to the freeze response." ⁶
- Social model of disability: this highlights that society can be disabling to some individuals and should be adjusted to improve accessibility; the individuals affected should not have to change themselves to fit society. At the IET, we follow this model in our values and our approach to global engineering challenges.

- Special interests (SIs): this is an intense interest and focus on a specific topic. It's a common trait in people who have autism or autism spectrum disorder (ASD) – the individual may endeavour to learn and immerse themselves in everything they can about their SI or collect as many associated items as possible. These interests can be anything at all, from sports teams to historical events and periods to beauty and healthcare; the list is endless, and the SI will be unique to the individual.
- Stimming/Stim: 'stimming' is when an individual performs a repetitive action – it can be done for a variety of purposes, including enjoyment, to self-soothe or calm anxiety, or to gain or reduce external sensory input. The individual actions are known as 'stims' – common examples include hand-flapping, rocking, tapping, jumping, repeating phrases, words or sounds, fidgeting with an object or touching a particular texture or material. Stims can be physical, verbal or auditory and are unique to each neurodivergent individual.
- Tic: this is a repetitive and involuntary motor or vocal output. It is a characteristic of Tourette Syndrome. Tics are unique to the individual and can manifest in many ways, such as repeating a sound or phrase, twitching or jerking, excessive blinking, involuntary facial expressions or clicking fingers. Like **stims**, tics can become more frequent at times of anxiety, stress or excitement. They can sometimes be suppressed, but this can be detrimental to the individual.

Attention Deficit Hyperactivity Disorder (ADHD)

Definition:

"Attention deficit hyperactivity disorder (ADHD) is a condition that affects people's behaviour. People with ADHD can seem restless, may have trouble concentrating and may act on impulse." (NHS, 2021).⁷

ADHD is believed to be prevalent in 7% of children and up to 5% of adults.⁸ The disorder has two recognised types (individuals who have traits of both are described as 'combined type'):

- Inattentive ADHD difficulty with focusing attention and becoming easily bored or distracted.
- Hyperactive-impulsive ADHD inattentive behaviour paired with hyperactivity and impulsiveness.

Research indicates that an individual with ADHD may display a range of the following traits – this list is not exhaustive:

- The ability to hyperfocus maintaining intense focus on a task of interest, sometimes neglecting to take breaks, eat or drink. During periods of hyperfocus, individuals can complete large amounts of learning or work.
- Difficulty with organisation struggling to prioritise tasks, often misplacing items, living or working in a disorganised environment or struggling to keep track of meetings, appointments or payments.
- Hyperactivity and impulsiveness talking quickly, fidgeting frequently and interrupting others without intending to. Impulsiveness may lead to acting without considering outcomes or dangers, perhaps by taking risks or spending excessively.
- Switching between tasks struggling to complete a task before beginning another, including picking up and abandoning multiple hobbies and projects.

- Difficulty maintaining attention struggling to maintain attention on tasks that are of low interest, time consuming or have no short-term rewards; and finding it difficult to remember or process verbal instructions.
- Executive dysfunction difficulties with motivation and initiating a task make it hard for the individual to complete a task, even though they may want to.

How might these traits manifest in the workplace?

Every individual with ADHD is different and how their traits manifest in the workplace is unique to them. However, here are some examples of how ADHD can negatively affect someone at work:

- making small mistakes
- occasionally failing to meet deadlines and arriving late to work or meetings
- working in a disorganised way, perhaps by maintaining a full inbox, misplacing emails or documents and failing to finish projects
- having inconsistent productivity completing large amounts of work at times and struggling to start tasks at others
- having low self-esteem and low selfconfidence.

However, individuals with ADHD also bring some very positive traits to a workplace, such as:

- Increased creativity they may have exceptional creativity skills and may approach tasks from a new perspective and in a unique way that's highly valuable in engineering and technology as well as other sectors.
- Increased productivity hyperfocus can enable an individual to complete vast amounts of work in a short time, especially when they're passionate about the project at hand.
- Resilience the experience of overcoming a range of barriers and challenges throughout their schooling and career can help build resilience, strong coping strategies and excellent problem-solving skills.
- Spontaneity and interpersonal skills a study into successful adults with ADHD highlights that they tend to have higher levels of spontaneity, social intelligence, humour and empathy – these are all highly valued traits for building relationships and for socially conscious innovating.⁹

How can we help people with ADHD to thrive in the workplace?

Every individual with ADHD has their own unique traits, so when it comes to identifying how best to support them, treating them as an individual is essential. If you're supporting a neurodivergent colleague, having a conversation and working with them will help you to achieve the best outcome for all.

There's no one-size-fits-all solution, but we've gathered some helpful suggestions, as follows.

Supportive ideas for employers and managers

- Reduce noise and distraction ideas include offering a workspace away from distractions like corridors or public spaces; providing noisecancelling headphones; enabling the individual to work from home more frequently; and encouraging them to block out 'focus time' in their diaries – this may also help to reduce the chance of sudden distraction from others. Many individuals with ADHD find that stimming helps them to concentrate, so allowing fidget devices can also be helpful. For more information on neuroinclusive office design, <u>take a look at this</u> helpful guide produced by AtkinsRéalis.¹⁰
- Provide help with time management this could include offering flexible working hours; scheduling regular check-ins; exploring calendar management tools with them; helping them to develop task prioritisation skills; and building timeliness strategies with them for when a deadline must be met. Head to the <u>Supportive</u> <u>software</u> page for more information on specific programmes that can help with organisation.
- Educate colleagues negative stereotypes and misconceptions held within an organisation can make it harder for people to be open about how they are struggling. It's vital to raise awareness on how a neurodivergent individual's experience can differ from that of a neurotypical colleague, and why they may be receiving additional support. Good ways to do this include holding colleague awareness sessions on neurodivergent conditions; inviting neurodivergent speakers in to share their experiences; highlighting resources that are already available from neurodivergent charities or other organisations; and highlighting neurodivergent awareness days throughout the year.
- Play to the individual's strengths there are many valuable traits that an individual with ADHD can bring to a team. Work with them to identify their unique strengths and the tasks they enjoy or thrive in, then explore how these can be best applied in their role.

Supportive ideas for colleagues

- Share agendas and areas of focus ahead of time – if you're arranging a meeting, share an agenda and any important discussion points in advance. This approach is considered best practice for all meetings because it gives all attendees the opportunity to prepare for and focus on what will be discussed.
- Be clear in your communication make sure your key points and any action points are clearly stated in your communications. To make them unmissable, try summarising them in bullet points at the start of your email. Avoid sending lengthy emails where key information is spread throughout. And if you give any verbal instructions, make sure you also provide them in written form.
- Support good organisation if you're working on a shared project, schedule regular catchups, to check on progress. Save important documents digitally in a shared area so you can both keep track of any changes and eliminate the risk of creating multiple versions.
- Avoid creating sudden distractions individuals with ADHD can find it challenging to concentrate, and it's even more difficult to bring the focus back once it has been lost. So be conscious of any distractions you might create in the workplace and take steps to prevent them. If you have a question or need something from them, message or email to ask when would be a good time to talk. Once this is established, make sure this appointment is entered in their diary or calendar.

Supportive ideas for individuals with ADHD

- Get to know yourself spend some time exploring what adjustments have been made for other individuals with ADHD, at your own workplace or elsewhere. You don't have to figure out on your own exactly what could work best for you, but learning about changes that have been made to support others will be a good starting point.
- Consider joining a neurodiversity network

 a neurodiversity network can be a great
 place to share your own experiences, concerns
 or questions, learn from the experience of
 others and grow your self-confidence. Some
 organisations have an internal neurodiversity
 network, but if yours doesn't, explore wider
 industry options like our IET Neurodiversity
 Member Network. You're not alone.
- Consider pursuing a diagnosis if you don't have an official diagnosis, consider if receiving one will be helpful to you. For some, having a diagnosis is validating, allows access to medication and is helpful when requesting support. However, the process can be challenging, which explains why many people decide not to go down the diagnosis route. Whatever you choose to do, remember that you are entitled to ask for workplace support, regardless of diagnosis.
- Help yourself to get motivated executive dysfunction can make starting a new project or progressing an existing one very difficult. Creating a schedule with set times when you'll work on aspects of the project can be helpful. Body doubling with another colleague during this 'focus time' can also help with motivation.
- Be kind to yourself remember that the barriers you may experience within the workplace are not a reflection of your abilities. They are a result of an environment that has been created to fit neurotypical ways of working. Don't blame yourself: instead, work with your employer and line manager to make your environment a better fit for you.

📒 Autism

Definition:

"Autism is a lifelong developmental disability which affects how people communicate and interact with the world." $^{\rm 11}$

The National Autistic Society ¹² estimates that there are around 700,000 autistic adults and children in the UK. Research into the condition has shown that autistic individuals may display a range of traits, including one or more of the following:

- Varied comfortability with social interaction

 finding it difficult to know, recognise
 or understand societal 'rules' to social
 interaction, which can in turn make socialising
 harder. Autistic individuals may miss certain
 conversational cues, struggle with eye contact
 or find it hard to identify their own emotions and
 those of others.
- A preference for routine being forced to step out of the normal routine can be an uncomfortable and anxiety-inducing experience.
- Exhibiting repetitive behaviours hand flapping, rocking or twirling hair are forms of stimming, which can help to reduce or increase sensory input or manage anxiety, depending on the individual's needs.
- Sensory sensitivities these may include heightened sensitivity to specific textures, lighting, tastes, sounds, temperatures or smells. They are usually very specific to the individual. Some sensory experiences can be comforting, while others can cause distress.
- Special Interests (SIs) some autistic individuals have a very focused level of interest in a particular topic, usually starting from childhood.
- Meltdowns or shutdowns in some instances, an autistic individual may become overstimulated by an environment or situation, causing them distress. This can exhibited in a variety of ways, including crying, shouting, stimming, lashing out or temporarily shutting down communication completely.¹³

How might these traits manifest in the workplace?

Every individual with autism is different and how their traits manifest in the workplace is unique to them. Traits exhibited may include:

- preferring to work alone this can be due to a range of factors, including social anxiety
- having a blunt or direct communication style
- struggling to work in environments with high sensory stimuli, like loud noises or bright lights
- preferring to complete familiar tasks and maintain a routine
- needing to take some time away from an environment or social situation that requires masking.



Although there may be challenges for autistic people in the workplace, they can bring tremendous value to an organisation. For example, they can exhibit:

- Excellent attention to detail autistic individuals can have a fantastic eye for detail and can apply a great deal of focus to their work. They tend to implement bottom-up information processing, which focuses on small details. This approach is more likely to capture key information and discrepancies that others may miss.
- Pattern recognition and knowledge retention

 research has shown areas of the brain associated with pattern recognition are more active in autistic brains than in neurotypical brains. According to Embrace Autism, autistic individuals are also often able to retain huge amounts of knowledge on a topic of interest. ¹⁴
- Honesty, loyalty and integrity as they often prefer routine, autistic individuals can excel at following workplace procedures and structure. They can also be very honest and loyal colleagues who build strong relationships with those they trust.
- Creative approaches research has shown that autistic people can display more originality than neurotypical people, as their unique way of thinking helps them generate different ideas. ¹⁵
- High productivity research suggests that autistic employees are as much as 140% more productive than their neurotypical colleagues.¹⁶

How can we help autistic individuals to thrive in the workplace?

Remember, autism is a spectrum disorder and the traits exhibited will vary greatly from one person to the next. The adjustments detailed below may prove useful when supporting an autistic colleague.

Supportive ideas for employers and line managers

- Implement inclusive hiring traditional hiring practices like interviews can be disabling, anxiety inducing and may prevent employers from seeing a candidate's true potential. Consider alternative approaches to hiring such as trial days, which focus on a candidate's capabilities within the role itself and less on their social abilities under pressure.
- Reduce sensory inputs consider giving individuals the option to work in a quiet space away from other colleagues or public areas. You could also offer noise cancelling headphones, avoid very brightly lit workspaces, provide screen filters or introduce desk dividers – these measures can help reduce the risk of overstimulation and the need to keep masking autistic traits. For more details on how to optimise the workplace for neurodivergent colleagues, read the neuroinclusive office design guide produced by AtkinsRéalis.¹⁷
- Be clear in your communication communicate directly, without metaphors or nuances. Provide concise written instructions and information on the aims and objectives of a piece of work or meeting and clearly highlight any actions the individual needs to complete.
- Allow time alone masking can be extremely tiring, drawing energy away from work-related tasks. Allowing neurodivergent people time away from masking situations throughout the day or week will help them to replenish their energy and deliver their best work. To maintain structure, work with them to set this regular time in their calendar.
- Arrange regular, short check-ins these will provide a welcome opportunity to exchange updates on progress and to ask and answer any questions in a regular and predictable space.
- Maintain structure many autistic individuals feel more comfortable working to a set timetable or structure. Where possible, offer a consistent desk or workspace, keep meetings regular and help to build the work-day structure that suits them best.



Supportive ideas for colleagues

- Communicate clearly avoid metaphor and excessive jargon. Cover key information concisely (bullet points are a great idea) and understand that autistic colleagues may ask more questions than others to ensure they have a full understanding and that your expectations will be met.
- Learn about autism attend awareness sessions or do your own research around the topic. Asking the individual what their preferences are is a great approach and should be prioritised, but having a base understanding of the condition takes the pressure off the individual because they won't have to explain everything.
- Be understanding some autistic people have a direct communication style that may unintentionally cause offence. If this happens, don't assume that the intention was to hurt or upset you because they may not be aware that their response could be interpreted in this way. However, it's okay to highlight the issue in a sensitive way.
- Include everyone autistic colleagues may sometimes opt to have lunch alone or avoid social gatherings, but they should still be invited. Time alone can be essential for them to recover energy from masking, and offering the choice lets them know they are welcome if they do decide to come along.

Supportive ideas for autistic individuals

- Get to know yourself spend some time exploring what adjustments have been made for other individuals with autism, either at your own workplace or elsewhere. You don't need to figure out on your own exactly what could work best for you, but learning about changes that have been made to support others will be a good starting point.
- Consider joining a network a network can be a great place to share your own experiences, concerns or questions, learn from the experience of others and grow your self-confidence. Some organisations have an internal neurodiversity network, but if yours doesn't, explore wider industry options. The IET has a neurodiversity network for members and the National Autistic Society has an <u>online community</u> that's open to all. You're not alone.
- Produce a handbook if you're already aware of some adjustments that are helpful to you at work, consider producing a 'handbook to me', which you can share with your manager and chosen colleagues. Include information on your strengths, your potential challenges and your requirements and wants in the workplace. This can remove to need to explain these requirements repeatedly and offer a helpful reference point for others.
- Consider pursuing a diagnosis if you don't have a diagnosis, consider if receiving one will be helpful to you. For some, having a diagnosis is validating, gives some insight into themselves and is helpful when requesting support. But the process can be complex, which is why many people decide not to go down the diagnosis route. Whatever you choose to do, remember that you are entitled to ask for and receive support, regardless of diagnosis.
- Be kind to yourself doing things differently doesn't mean that you're doing them incorrectly. Take the pressure off yourself to act or be a certain way and make sure you take time out of high masking or high sensory situations. This approach will enable you to perform better in your role and avoid potential meltdowns, shutdowns or burnouts.

Dyslexia

Definition:

"A condition affecting the brain that makes it difficult for someone to read and write." ¹⁸

The British Dyslexia Association estimates that around 10% of the population is dyslexic.¹⁹ All individuals with dyslexia will experience their neurotype differently – here are some of the most common traits:

- Challenges with reading and writing struggling with spelling, confusing visually similar words (like 'dog' and 'dug'), taking longer to write things, or needing to re-read text multiple times to understand it.
- Difficulty with task and time management finding it hard to prioritise tasks, manage time effectively or remember key information, dates or deadlines.
- **Difficulty in focusing** being easily distracted in certain environments and susceptible to 'information overload' or overstimulation.
- Avoidance of reading and writing reading and writing may feel overwhelming. Lack of confidence in these skills may lead to avoidance of tasks that involve doing them.
- Speech differences some individuals with dyslexia may lack confidence while speaking publicly and misuse or mispronounce words; but many others are very skilled at explaining their thoughts verbally and prefer this method of communicating over writing.

How might these traits manifest within the workplace?

How an individual's dyslexia affects the way they work will be unique to them. However, they may exhibit one or more of the following behaviours in the workplace:

- avoidance of tasks that require reading and/or writing, like note taking or reading long emails
- communications littered with small mistakes. Although these may appear to be careless, they are a result of the individual's neurotype
- disorganisation however, some dyslexic individuals are extremely organised, having developed methods to better manage organisation
- difficulty in meeting deadlines or retaining information when distracted
- low confidence in their work or low selfesteem, particularly if they are undiagnosed or were diagnosed later in life.



Although individuals with dyslexia may encounter barriers in the workplace, there are many areas in which they excel and contribute unique skills, such as:

- Excellent intuition highly intuitive and empathetic, and very skilled at accurately assessing situations, individuals and outcomes based on limited evidence or information. This often makes them great decision makers.
- Ability to see the 'big picture' skilled at assessing multiple aspects and details of a project at one time and making interconnections (also known as 'three-dimensional thinking'). They can therefore make brilliant project managers and analysts.
- Observational skills highly observant and able to identify anomalies in large amounts of information or data, due to their ability to identify patterns and notice when something is 'out of place'.
- Creativity and imagination did you know that up to 40% of UK entrepreneurs ²⁰ have dyslexia, as do many artists and musicians? Individuals with this neurotype often have exceptional imaginations and can 'think outside the box', making them fantastic innovators and designers.
- Memory although some individuals with dyslexia may struggle with their short-term memory, many have excellent long-term memory skills and can retain details, particularly when it comes to visual information and experiences.

How can we help individuals with dyslexia to thrive in the workplace?

The specific workplace support required for a colleague with dyslexia will be unique to them, so it's always best to have a conversation with the individual to discern what will be a good fit for their needs.

However, based on existing research and lived experiences, the adjustments and considerations outlined below may be useful in supporting an individual with dyslexia to achieve their best at work.

Supportive ideas for employers and line managers

- Implement inclusive hiring overly lengthy and wordy application processes can deter individuals with dyslexia from applying for a role. Consider how you can make applying and on-boarding more inclusive, perhaps by allowing candidates to submit recorded alternatives to written cover letters or CVs; by avoiding long, free-text forms; or by offering trial days to assess their abilities.
- Explore assistive technology many IT programs are now available that can be helpful to someone with dyslexia, including text-to-speech and speech-to-text programs, spell-check and grammar-assistive programs, coloured text overlays and digital mind-mapping programs. Assistive technology options are rapidly expanding so research what's available with the individual, based on their preferences, to find what will be the best fit for them. You can find more details on assistive tech programs on the Supportive software page.
- Provide task-prioritisation support be clear on the timeframe of a project from the start and help the individual to create a system that allows them to prioritise tasks for themselves quickly and easily. For example, tasks could be colour- or number-coded, based on their level of urgency and priority.
- Provide time-management support empower the individual to manage their time more effectively by helping them to build a weekly schedule that includes regular check-ins for key projects. Work with them to implement a reminder system in their calendar or phone to make sure projects remain on track. If they prefer a physical approach, use paper calendars, planners, diaries or prompts, for example, Post-It notes.
- Reduce workplace distractions enable them to work in areas with minimal distractions, to aid focus and prevent sensory or information overload. This could mean allowing them to work from home more frequently; allocating a desk or workspace in a quiet place away from public areas; offering noise-cancelling headphones; or allowing them to block out dedicated 'focus time' in their calendars. For more information on <u>neuroinclusive</u> office design, take a look at the guide produced by AtkinsRéalis.²¹



Supportive ideas for colleagues

- Offer a second pair of eyes offering to check through their written work or communications can be very helpful to a dyslexic individual. Having a non-judgemental 'second pair of eyes' on a draft can make them feel more confident about their work before it's submitted, and you can help to highlight errors that they can avoid making in future work.
- Prioritise verbal communication some individuals with dyslexia prefer verbal communication to reading and writing. If this is the case, give verbal instructions as well as written instructions, allow them to use recording devices to take verbal notes and allow them to submit work in an audio or video format where possible.
- Be understanding you may notice that a colleague with dyslexia has spelling mistakes or unusual grammar in their written communications. Be aware that this is not due to lack of care in their work, and politely ask for clarification if necessary.
- Make documents editable when sharing documentation with a colleague who has dyslexia, it can be helpful to send in an editable format. This will allow them to adjust the font, text size, colouring and spacing to suit their unique preferences and make the document more accessible for them.
- Send information ahead of time send them any information or documentation in advance, so they have plenty of time to read through and process it. Pulling out and highlighting any key information using bullet points or highlighter can be very helpful. Alternatively, you could send it using a voice note.

Supportive ideas for individuals with dyslexia

- Get to know yourself spend some time exploring what adjustments have been made for other individuals with dyslexia, either at your own workplace or elsewhere. You don't have to figure out on your own exactly what could work best for you, but learning about changes that have been made to support others will be a good starting point.
- Consider joining a network a network can be a great place to share your own experiences, concerns or questions, learn from others about theirs and grow your self-confidence. Some organisations have an internal neurodiversity network, but if yours doesn't, explore options within the wider industry, like our IET Neurodiversity Member Network. You're not alone.
- Explore assistive technology there is a wealth of assistive programs and technology designed to support people with neurotypes like dyslexia and many are free to use. Work with your employer or line manager to test things out and identify what might be the most helpful option for you. Examples include dictate software, a recording device (most smartphones have this built in), specific fonts and colours and mind-mapping programs.
- Record your successes many people tend to dwell on their mistakes at work, rather than things they've excelled at. This is not a useful habit because it can erode self-confidence. Counteract this tendency by keeping a record of any successes and positive feedback you receive and refer back to it frequently. If you struggle to identify your own strengths, ask your line manager or a colleague for input and explore ways you can play to your strengths in your work role.
- Be kind to yourself dyslexia is in no way related to laziness or intellectual ability. Although you may need more time to complete certain tasks or projects, you are no less capable of completing them than your peers. Be patient with yourself and remind yourself of the unique strengths that your neurotype can bring into a workplace, such as creativity, intuitiveness and attention to detail.

📕 Dyscalculia

Definition:

"Dyscalculia is a specific and persistent difficulty in understanding numbers which can lead to a diverse range of difficulties with mathematics" ²²

The British Dyslexia Association states that around 6% of the population have dyscalculia and that research into this condition is about 30 years behind research into linked conditions like dyslexia. As a result, an individual with dyscalculia could be 100 times less likely to receive a diagnosis and be given support.²³ For this reason, it's imperative to educate yourself on the possible signs.



Despite limited existing research, we do know that someone with dyscalculia may exhibit traits like:

- Difficulty recognising numbers it may be harder to identify numbers and how numbers relate to each other (for example, numbers may appear as symbols on a page or screen). As a result, individuals with dyscalculia might use slower, more visual methods to represent numbers in mathematics, like drawing and counting individual dashes.
- Reduced arithmetic abilities difficulty in remembering or grasping mathematical formulas, concepts or rules, like addition, subtraction, division and multiplication.
- Struggles with number patterns it may be harder to predict numerical patterns and memorise times table sequences. For example, the sequence of 5, 10, 15, 20 may show a clear pattern to those without the condition, but not to an individual with dyscalculia.
- Difficulty remembering numbers a tendency to forget numerical codes, passwords or deadlines.

The British Dyslexia Association states that around 6% of the population have dyscalculia

There are many roles within the engineering and technology sector where strong mathematical ability is listed as a requirement, which can present significant barriers for an individual with dyscalculia to enter the industry. However, this doesn't make it impossible for them to work and thrive within the sector – indeed, with suitable support in place, the experience can be enhanced for the individual and organisation alike.

Following, we list some recognised methods to support an individual with dyscalculia in the workplace.

Supportive ideas for employers and line managers

- Change abstracts to objects an individual with dyscalculia may see mathematical problems as difficult abstract concepts. Help to bring the problem into the physical space by using objects or graphs to represent numbers; writing problems down in sentence form; or drawing calculations out using images to help them better visualise them.
- Break tasks down it's easy for anyone to get overwhelmed by long, complex mathematical problems or concepts. Breaking these down into smaller components will help all colleagues focus and reach accurate results. However, an individual with dyscalculia may need more support and guidance on how to do this effectively.
- Conduct regular reviews as dyscalculia can affect an individual's ability to memorise and retain numbers and mathematical concepts, regular refresher sessions can be invaluable in helping to build their internal bank of knowledge. As with anything else, regular practice will lead to improved ability and increased confidence.
- Build a bank having a physical resource, such as a notebook or guide that outlines the key mathematical processes required to complete the individual's role, can be a great source of support. Help the individual to build this resource in a way that they understand – perhaps by adding supporting images or sentences.

Supportive ideas for individuals with dyscalculia

- Consider joining a neurodiversity network

 a network can be a great place to share your own experiences, concerns or questions, learn from others about theirs and grow your self-confidence. Some organisations have an internal neurodiversity network, but if yours doesn't, explore options within the wider industry, like our IET Neurodiversity Member Network.
- Display key numbers keep notes with key numerical information (like your organisation's phone number and important deadlines) in a visible place around your workspace so that they are easily accessible.
- Explore organisational tools visual planning software can help you to keep track of your time and projects. Tiimo and Thruday are great options that have been specifically designed to support neurodivergent people. Take a look at the Supportive software page for more options.
- Consider pursuing a diagnosis if you don't have a diagnosis, consider if receiving one will be helpful to you. For some, having a diagnosis is validating, offers personal insight and is helpful when requesting support. However, the process can be complex, which is why many people decide not to go down the diagnosis route. Whatever you choose to do, remember that you are entitled to ask for and receive support, regardless of diagnosis.
- Be kind to yourself remember that although you may need more time to complete numerical aspects of a task, you are not less capable of completing them than your peers. Be patient with yourself and remind yourself of the unique strengths that your neurotype can bring to a workplace, such as strong verbal communication skills, innovative problem solving and creative thinking.

🚍 Dysgraphia

Definition:

"Dysgraphia is a learning disability characterized by writing difficulties, such as impaired handwriting, poor spelling, and problems selecting the correct words to use." ²⁴

Researchers estimate that up to 20% of people have dysgraphia traits.²⁵ Much like dyscalculia, there is limited research available on the extent and experience of dysgraphia. However, existing studies have identified the following related traits in some individuals with dysgraphia:

- Disorganised handwriting they may have messy or jumbled lettering, struggle to write in a straight line or within margins, or write letters in reverse. In some cases, handwriting may be illegible.
- Trouble with written syntax they may miss out words entirely or use words, grammar or punctuation incorrectly. They may also use a seemingly incoherent sentence structure in their writing.
- Difficulty using writing tools they may hold a pen or pencil in an atypical way, perhaps gripping it awkwardly or very tightly, even to the point where it may become painful. They may also write very slowly compared to their peers.
- Difficulty getting thoughts on paper

 although they may have a brilliant
 understanding of a topic, they may find it
 hard to organise or express these thoughts
 when writing.

Researchers estimate that up to 20% of people have dysgraphia traits

Research also highlights that the traits exhibited by someone with dysgraphia may change as they get older. Motor-related impairments, like difficulties with writing tools or very messy handwriting, generally affect children more than adults. However, adults with dysgraphia tend to struggle more with aspects like sentence structure, using correct grammar and translating their thoughts to paper.

As with all neurodiverse conditions, it's important to remember everyone will experience dysgraphia differently. That's why it's always best to work alongside the individual to find what works for them. To help guide these conversations, we've listed some recommended adjustments that could support a colleague with dysgraphia at work.

Supportive ideas for employers and line managers

- Implement assistive technology voiceto-text programs can help people get their thoughts down on a page without the need to write them manually. Enabling them to submit work in an alternative format, such as a verbal recording, can also be very productive.
- Type, don't write make sure they have the option to type their notes or projects using a keyboard. In this way they won't need to write letters by hand, which some may struggle to do. Electronic devices, such as laptops or tablets, also include or allow for programs like Spellcheck and Grammarly, which can automatically correct spelling, syntax and grammar, taking the pressure off the individual to avoid error. Visit our supportive software page for more assistive technology options.
- Give them time in some instances writing may be unavoidable, but that doesn't mean someone with dysgraphia can't take part and do a good job. Remember that writing tasks may take them longer to complete, so allow extra time if needed.
- Get a grip! if it's essential that they use a pen, pencil or stylus, explore grip devices that can encourage a more comfortable hand position when holding writing tools.



Supportive ideas for individuals with dysgraphia

- Practise your fine motor skills developing these can help with the physical aspect of writing. Activities like clay modelling, letter formation drills and manipulating small objects like LEGO® bricks are all great for increasing finger strength and dexterity.
- Maintain a word bank when you come across a word that you struggle with, add it to a word bank (make sure the spelling and letter formation are correct). Your word bank should be easily accessible throughout your day – you could store it in a notebook, on your computer or phone, or via post-it notes or a poster by your workspace.
- Consider joining a neurodiversity network

 a network can be a great place to share your own experiences, concerns or questions, learn from others about theirs and grow your self-confidence. Some organisations have an internal neurodiversity network, but if yours doesn't, explore options within the wider industry. The IET offers a neurodiversity network for members, and there are further options online and on social media. You're not alone.
- Explore assistive technology assistive software such as speech-to-text, mind mapping programs and grammar support tools can be a great help to individuals with dysgraphia. There are also plenty of physical support options available, such as recording devices, writing tool grips, angled desks and screen readers. You can find more information about what's available on our <u>supportive software</u> page.
- Be kind to yourself. Remember that although you may need more time to complete certain tasks or projects, you are not less capable of completing them than your peers. Be patient with yourself and remind yourself of the unique strengths that your neurotype can bring into a workplace, such as strong verbal communication skills, innovative problem solving and creative thinking.

📕 Dyspraxia

Definition:

"Dyspraxia, also known as developmental co-ordination disorder (DCD), is a common disorder that affects movement and co-ordination." ²⁶

Research is limited, but it's estimated that around 6% of the population have dyspraxia, with men being four times more likely to be affected than women. Based on existing research, it is understood that individuals with dyspraxia may exhibit one or more of the following traits:

- Limited coordination the key trait associated with dyspraxia is difficulty to coordinate body movements. This means that movements can require considerably more effort to complete. Traits may include poor balance, regularly tripping or bumping into things, moving awkwardly and finding it hard to learn new motor skills and transfer them to different tasks.
- Difficulties interacting with objects related to limited coordination skills, it may be harder to interact with objects, like tools and equipment.
- Struggles with organisation the struggles may be physical or mental. For example, they may regularly lose or forget items or information, or find it hard to organise their thoughts.
- Time-management difficulties it may be harder for an individual with dyspraxia to remember appointments or meet deadlines and they may more frequently arrive late.
- Difficulties with speech speech can be impacted. For example, they may speak slowly or leave long pauses before responding. This can be due to difficulties making the movements within the mouth required to generate words and sounds, or due to difficulties in organising thoughts and expressing them verbally.

Dyspraxia has been closely linked to other neurodivergent conditions. Research has suggested that around 52% of children with dyslexia also have traits of dyspraxia, and the same is true for around 50% of children with ADHD.²⁷

All individuals with dyspraxia will exhibit traits related to their neurodiversity, so will require support tailored to their specific needs. Following, we provide some examples of adjustments that have been implemented to support individuals with dyspraxia in the workplace.





Supportive ideas for employers and line managers

- Make instructions available if the individual's role requires interaction with tools and equipment, make sure user guides or instructions for these are easily accessible. Support the individual in practising the movements required to use the equipment so that they become more familiar with these motor skills.
- Support organisation skills work with them to find methods of organisation that suit them, like implementing timetables, calendar reminders, filing systems and note-taking. Consider providing a dedicated space where they can store items at work.
- Optimise the workspace help them to optimise their working environment and reduce risk. For example, if they are positioned at a desk, they may benefit from an ergonomic keyboard; or if they work in a practical field with large amounts of equipment, help them to reduce obstacles or items that could cause them to trip or injure themselves. This will benefit everyone.
- Educate, educate, educate some colleagues may not know or understand how dyspraxia can affect someone. Raising awareness of this condition within your organisation can help colleagues to recognise the signs and be more patient and compassionate with colleagues who are affected. Dyspraxia Awareness Week, which takes place during the first week of October, offers a great opportunity to do this.

Supportive ideas for individuals with dyspraxia

- Practise your motor skills taking in part in activities like dancing, cooking, gardening, computer games or swimming can help develop your motor skills and improve your strength and balance.
- Explore therapies occupational therapy can improve your coordination and help you identify ways to manage everyday tasks that require fine motor skills. Talking therapies such as cognitive behavioural therapy (CBT) can help challenge negative ways of thinking and increase your confidence and assertiveness.
- Consider joining a neurodiversity network

 a network can be a great place to share your own experiences, concerns or questions, learn from others about theirs and grow your self-confidence. Some organisations have an internal neurodiversity network, but if yours doesn't, explore options within the wider industry. The IET offers a neurodiversity network for members, and there are various online forums you can join, such as Dyspraxic Adults. You're not alone.
- Investigate organisational aids there are several programs or apps that support organisation, some of which are designed specifically by and for neurodivergent individuals, like Tiimo and Thruday. Make use of reminder features on your phone or computer, or use physical reminder methods like Post-it notes, diaries or planners.
- Be kind to yourself remember that although you may need more time to complete certain tasks or projects, you are not less capable of completing them than your peers. Be patient with yourself and remind yourself of the unique strengths that your neurotype can bring to a workplace, such as creativity, problem solving skills and resilience.

💳 Tourette Syndrome

Definition:

"Tourette Syndrome is an inherited, neurological condition, the key features of which are tics, involuntary and uncontrollable sounds and movements." ²⁸

It's estimated that there are approximately 300,000 individuals with Tourette Syndrome (TS) in the UK. The condition was thought to be more common in men and boys than in women and girls, but recent research suggests that this imbalance is due to medical bias.²⁹

The way that an individual is affected by TS is unique to them. However, individuals with this neurotype tend to exhibit one or more of the following traits:

- Vocal and motor tics tics are the main trait of TS. They are involuntary movements or sounds, and individuals with TS often exhibit a combination of both. Tics can be nearly anything, but common examples include blinking, throat-clearing, clicking, repeating words or sounds, tapping, grimacing or jerking. Swearing can also be a tic, but this only affects around 10% of individuals with TS.
- Anxiety and other co-occurring conditions some individuals may experience co-occurring conditions including anxiety disorders, depression, ADHD, obsessive compulsive disorder (OCD) and difficulties with anger.
- Premonitory sensations these are the urges felt by the individual before a tic. It can be incredibly compelling. Some have compared it to the sensation before a cough or sneeze. In some cases, a tic will need to be repeated multiple times to satisfy the premonitory urge. Suppressing the urge is possible but it is not always successful and can lead to fatigue. Tics can be difficult for an individual to manage and can even cause physical pain or contribute to symptoms of poor mental health. Although there is currently no cure for TS, symptoms may improve with age or can be treated with therapies and/or medication.

As with all neurotypes, individuals with TS have unique strengths that they can bring to a workplace and their everyday relationships. These can include:

- Strong cognitive control individuals with TS often work hard to suppress tics, so their brains can become better equipped for concentration, information processing and adapting behaviour based on their goal, ³⁰
- Creativity research findings suggest that some individuals with TS have higher levels of creativity and abstract thinking than neurotypical people. They can often excel in roles that require creative skills or idea generation.
- Resilience and empathy like many neurodivergent individuals who have experienced barriers within a neurotypical environment, individuals with TS often exhibit high levels of empathy and resilience. These attributes make them compassionate and conscientious team members.
- Energy and productivity many individuals with TS bring passion and energy to their work and can complete tasks at a very fast pace when they are interested in the topic or project at hand. This can make them very productive, energising colleagues and team members.

Every individual with TS will have their own preferences when it comes workplace adjustments, and you should always have a conversation with them before implementing any changes. However, the following actions could help to make their experience at work more comfortable.

Supportive ideas for employers and line managers

- Raise awareness there are still many misconceptions surrounding TS. Running sessions or sharing information that dispels misinformation and increases knowledge of the facts can help members of your organisation to understand colleagues with TS better. For example, you could invite someone with lived experience of TS to deliver an all-colleague talk or share information from charities or organisations such as <u>Tourettes Action</u>.
- Optimise the workspace reducing distractions and potential triggers in the working environment can help an individual with TS to reduce tics and improve concentration. Depending on the workplace, offering a private space where they can freely tic (away from others) or enabling them to work from home more often can be beneficial. Each person with TS will have unique triggers, so it's best to have a conversation with them about theirs and how you can reduce them at work.
- Be flexible understand that in high-stress situations it may be harder to suppress tics and that the energy used to do so may affect their ability to concentrate. Individuals with TS shouldn't be excluded from high-demand projects but offering short breaks away from situations that could induce anxiety or stress could be helpful.
- Support open communication tics can sometimes generate negative comments from those who don't understand them. Minimise the likelihood of this by supporting open communication at work between the individual and their colleagues or clients. If they regularly work with unfamiliar clients or colleagues, make sure they are advised of the TS in advance. This approach will enable new clients and colleagues to recognise tics when they occur, preventing uncomfortable conversations and taking the pressure off the individual to explain in the moment.

It's estimated that there are approximately 300,000 individuals

with Tourette Syndrome (TS) in the UK

Supportive ideas for individuals with Tourette Syndrome

- Consider joining a neurodiversity network – a network can be a great place to share your own experiences, concerns or questions, learn from others about theirs and grow your self-confidence. Some organisations have an internal neurodiversity network, but if yours doesn't, explore options within the wider industry. The IET offers a neurodiversity network for members, and there are further options online and on social media. For example, Tourettes Action has a range of <u>online support groups</u> for adults. You're not alone.
- Identify ways to manage anxiety anxiety and stress can make tics worse. Practising yoga, going out for a walk, doing breathing techniques (like square breathing) and mindfulness exercises can all help to ground you when you're feeling on edge.
- Explore therapy there are various therapies available to support you in managing your tics, including Comprehensive Behavioural Intervention for Tics (CBIT) and exposure with response prevention (ERP).

E Synaesthesia

Definition:

"Synaesthesia is a neurological trait or condition that results in a merging of senses that aren't normally connected." ³¹

Every individual with synaesthesia will experience the condition in a unique way, with their own sense associations and connections. For example, they may 'see' music, 'taste' words, or 'hear' shapes.

Synaesthesia is believed to be present in between 2% and 4% of the population.³² There are no known treatments. Many with the condition do not seek to treat it, as they enjoy the sensory experiences

it brings. However, for others the uniqueness of their perceptions can be isolating.³³

Individuals with synaesthesia often excel in creative roles due to their unique way of experiencing and perceiving the world. They are also known to have strong memories, information recall and processing skills.³⁴

Hyperlexia

Definition:

"Hyperlexia is a fascination with letters and numbers. People with hyperlexia have an innate ability to decode or sound out words very quickly and are commonly known as 'super readers'." ³⁵

There are three key forms of hyperlexia: ³⁶

- Hyperlexia 1 this form occurs when a child who does not have learning or developmental disabilities learns to read at a rate and level that's beyond what's expected for their age. Type 1 is usually temporary, because other children will 'catch up' as they grow up.
- Hyperlexia 2 this form occurs specifically in children with autism and manifests as a special interest in numbers and letters. They may be exceptional and keen readers and have an ability to remember numbers and dates.

They are likely to exhibit autism traits including difficulty with eye contact and sensory sensitivities. Type 2 does not disappear with age.

 Hyperlexia 3 – this form is associated with autism, but it does fade as the individual ages. Individuals with hyperlexia 3 are less likely to exhibit other autism traits, like difficulty with eye contact, but they may have lower verbal abilities than their peers.

Adults with hyperlexia can bring a range of strengths to the workplace, including creativity, problem-solving skills, exceptional linguistic and numerical abilities, and a great memory.

Intersectionality – Neurodivergent individuals from under-represented groups

As part of our 2023 <u>Neurodiversity in</u> <u>Engineering and Technology research</u>, we held several focus group sessions specifically exploring the experience of neurodivergent individuals from other under-represented groups, including women and those of a minoritised ethnicity.

These sessions revealed that being part of another minority group often magnifies challenges for neurodivergent people. These under-represented groups could include, but are not limited to:

- women engineers
- minority ethnic groups
- people with a co-occurring disability or condition
- members of the LGBTQ+ community
- certain age groups.

People see me as abrupt and argumentative. I wonder if part of it is that I don't fit the stereotype of how women are supposed to behave.

Quote from our focus group for women engineers.

I'm already worried about needing to look like I'm more capable than other people. It would be another negative, different from the norm, not a plus. It would be something else I'd have to overcome at work.

Quote from our minoritised ethnicity focus group.

How can you support these individuals?

- Offer community support create a safe space for them to speak and share with each other. This could take the form of separate intersectional colleague networks or neurodiversity network sessions dedicated to intersectional groups.
- Listen up! as well as providing an opportunity for neurodivergent colleagues to engage with each other, make sure you provide a route for these individuals to share their concerns or provide feedback anonymously to the organisation. Having a non-judgemental and safe place to share is helpful for all colleagues.
- Raise awareness educate your colleagues (and yourself) on the different barriers faced by minority groups. You could use resources, blogs and information available online, or invite intersectional speakers to share their lived experiences with your organisation (you may find it useful to get in touch with organisations like AFBE, WISE, EqualEngineers and Business Disability Forum).

Workplace adjustments

Everyone who wants to work should be enabled and empowered to do so. Individuals with disabilities, including those related to neurodivergence, are entitled to receive workplace adjustments that help them enter and remain in work.

Employers and line managers need to be aware of the different ways to provide this support.

Providing workplace adjustments

It's important to establish a clear internal process for submitting and managing adjustment requests. You should:

- Have a dedicated place where these requests can be sent and managed, like an inbox or online ticketing system.
- Check that line managers understand how to access support for colleagues.
- Make sure line managers are trained to manage adjustment requests sensitively and privately.
- Maintain a document to track adjustments and progress, such as a tailored adjustment plan (TAP) or a workplace adjustment plan (WAP).

Not all workplace adjustments will come at a cost, but some will. If full funding can't be covered by the employer, consider applying for support via the Access to Work scheme.

Access to Work

Access to Work is a UK Government scheme. It offers funding support for workplace adjustments needed by those who have a disability, including neurodivergent conditions. A grant application can be made **online** or by phone by the eligible individual and not by the employer or line manager. You'll find information on eligibility **here**.

Information for line managers

If you have a neurodivergent team member who needs a workplace adjustment, follow this sequence of tasks.

- Meet with them in a private space to discuss what support might work best for them. Document the discussion in a TAP. This will help facilitate the conversation by identifying the current barriers your team member is facing and setting out a series of actions to remove or improve them. You can see an example of a TAP here.
- 2. After the initial meeting, you should both follow up on any assigned actions within the TAP. For a manager, this might involve contacting Occupational Health or raising a request with a relevant internal department, like IT or Facilities, to request a specific type of equipment, assistive technology or advice on existing tools available that could help to reduce or remove a particular barrier. For the individual, this could involve making a grant application to Access to Work.
- **3.** Arrange regular check-in sessions to update each other on progress made with the actions set out in the TAP, and to ask the individual about their general wellbeing at work.

Accessibility



Digital accessibility

Always consider digital accessibility for communications (internal and external) and webpages. Here are some useful areas to investigate:

- Can dictate software be used on your documents and web pages?
- Can colouring and contrast changes be applied?
- Are you using a clear font in a size that's accessible?
- Are your internal and external webpages clear to navigate and concise?

You'll find more information in our **Inclusive Communications Guide**.

Accessible meetings

- In virtual meetings, allow colleagues to choose if they use their camera. Although cameras can be helpful, in some instances they may cause distraction or anxiety. There may however be occasions where cameras are essential, and this should be clearly communicated ahead of the meeting.
- Ensure there are opportunities to move around. Some participants may prefer to fidget, stim or do a task that occupies their hands. This can aid concentration for some individuals, so aim to allow this when possible.
- In virtual meetings, it can be harder to know when someone has finished speaking, thus making it easier to interrupt others. Make use of features on your call platform that help reduce this, such as the 'raise hand' feature on Microsoft Teams.
- Some neurodivergent colleagues may find it harder to speak up during a meeting. It's best practice to offer multiple routes to contribute, for example, verbally and via chat function in virtual meetings. It's also a good idea to end a meeting by asking each participant if they have anything to add, so everyone has an opportunity to share.

Career progression

Our neurodiversity report and other existing research have shown that there is a 'neurodivergent leadership ceiling' that prevents individuals from reaching management positions.

For example:

- 46% of employed autistic adults are overeducated or overqualified for their roles. ³⁷
- Individuals with ADHD are 18 times more likely to be disciplined at work for perceived behaviour problems, such as reduced attention span, hyperfocus and organisational difficulties. They are also 60% more likely to lose their jobs. ³⁸
- Only 14% of people with dyslexia feel that their organisation understands the value of dyslexic thinking.³⁹

This means we could be missing out on diversity of thought in leadership positions, which in turn risks restricting representation, success and progression.

How can you help break the neurodivergent leadership ceiling?

- Involve neurodivergent people in the hiring process (for example, when reviewing applications or holding interviews) and make sure you include neurodivergent panel members in selection boards for governance positions.
- Look at your application processes and consider whether you are at risk of excluding or overlooking neurodivergent talent. For example, does your application form allow for dictation? Are you being clear about essential and desirable criteria in the job description? If you're unsure, you could work with an external neurodiversity organisation to review your processes or consult your internal neurodiversity network.
- Consider what's essential to success in the role. Candidates may have varying interpersonal skills or may have difficulty with reading and writing but may still be competent to complete the job. Remember that assistive technology can help to reduce barriers for some, and that individuals should not be excluded based on their neurodivergent traits.

Professional Registration

At the IET we've taken several steps to improve the Professional Registration process for neurodivergent engineers and technicians, and we're committed to continuing this journey towards better accessibility across all our processes.

Actions we've taken so far include:

- Working with Professional Registration Advisors (PRAs) who are familiar with supporting neurodivergent applicants.
- Offering extended deadlines and a higher number of support sessions with PRAs.
- Working with our Professional Registration Interviewers and neurodivergent applicants to make sure the interview process is accessible and as comfortable as possible.

Many neurodivergent people we spoke to in our research cited low confidence and 'Imposter Syndrome' as a key factor that was preventing them from progressing at work. Increasing confidence is key and it takes time, however, here are a few proactive steps that neurodivergent individuals can take to demonstrate their desire and ability to progress:

- Consider Professional Registration. This can help you stand out from your colleagues and shows your commitment to progression
- Speak to other neurodivergent colleagues or role models who have progressed, and ask how they were supported and what would have been helpful to know
- Ask about opportunities to shadow colleagues in a role you'd like to progress into. This will show initiative and you'll learn more about the role itself and if it's a good fit for you
- After learning about the objectives and responsibilities of the role you'd like to progress in to, discuss with your manager about how you can incorporate more of these type of tasks or projects into your own role in a way that does not negatively impact your workload.

Allyship

Building neuroinclusive workplaces requires everyone to enhance their own understanding of neurodiversity and consider the potential impact of their actions on neurodivergent individuals.

Allyship involves recognising and using your own privilege to support and uplift those who are marginalised or do not have the same privileges. By being an ally to your neurodivergent colleagues, you can help foster an inclusive culture where everyone can be themselves and thrive at work.

Here are some simple examples of how you can be a supportive ally to your neurodivergent colleagues.

- Recognise the barriers neurodivergent colleagues may face obstacles in the workplace that those who are neurotypical will not. Recognising this and being understanding will go a long way in helping those colleagues feel seen and heard. The barriers they face may be unique to their specific neurotype (see previous sections for more information).
- Remember that allyship is not a 'badge' remember that allyship is a process. It's great to consider yourself an ally, but supporting neurodivergent colleagues effectively will require you to keep learning from and listening to them, and to build positive and trusting relationships over time. It's also a good idea to hold awareness sessions, or encourage your workplace to do so. This will help raise general awareness, prompt open conversations and dispel misinformation around neurodivergence.
- Be accountable it's great to listen to your neurodivergent colleagues, but it's not their job to educate you. Consider doing your own research around neurodiversity and pass your learnings on to other colleagues, particularly if you hear something that's incorrect or ignorant. And if it's you who gets it wrong, don't be hard on yourself – apologise when you can and take note of how you would approach the same situation or interaction more positively next time. Reading this toolkit is an excellent place to start, but you might also like to take a look at our <u>Neurodiversity</u> <u>resources</u> page for more great sources of information.
- Treat neurodivergent colleagues like adults – although neurodivergent individuals may face barriers that you might not, they bring unique strengths to the workplace and are as capable and valuable as their peers. When offering support, avoid being condescending in your approach and always treat neurodivergent individuals like adults. More information on how to support specific neurotypes can be found within the relevant sections of this toolkit.

Neurodiversity resources

General resources

Genius Within Offering assessments, information and support for neurodiverse people: **geniuswithin.org**

Neurodiversity Hub Guidance and resources for students, universities and employers: <u>neurodiversityhub.org</u>

Different Brains Offering mentorship, resources, podcasts and neurodiversity news: **differentbrains.org**

Exceptional Individuals

Neurodiversity consulting, recruitment and employment support to employers and individuals with neurodiversity: **exceptionalindividuals.com**

Neurodiversity Celebration Week

Global initiative aimed at educating and challenging stereotypes. Resources for children and adults with neurodiversity: **neurodiversityweek.com**

Business Disability Forum

Toolkits and guidance on living with neurodiversity and supporting others who are: **businessdisabilityforum.org.uk**

Neurodiversity in Business

Industry group for organisations to share good practice on neurodivergent recruitment, retention and empowerment: **neurodiversityinbusiness.org/about-us**

Neuroinclusive office design guide

Guidance and recommendations for neuroinclusion within the physical workplace: **neuroinclusive-office-design.pdf (atkinsrealis.com)**

ADHD

ADHD UK National charity providing information on neurodiversity, diagnosis, data and support: adhduk.co.uk

ADHD Foundation

Charity offering resources, diagnosis support, training, events and webinars: **adhdfoundation.org.uk**

ADHDadultUK

Charity and peer to peer support for adults with ADHD: **adhdadult.uk**

ADHD Aware

Charity offering peer support, training, information and resources for adults living with ADHD: **adhdaware.org.uk**

Autism / ASD

National Autistic Society

Diagnostic and residential services, advice and guidance for autistic adults and young people pre and post diagnosis: **autism.org.uk**

Autism Together

Services, advice and courses for autistic individuals and those who support someone with autism: autismtogether.co.uk

Square Peg

Podcast and community for autistic adults: **squarepeg.community**

Asperger/Autism Network

Information for individuals, families, and professionals and social support: **<u>aane.org/resources/adults</u>**

Dyslexia

British Dyslexia Association

A membership organisation working to achieve a dyslexia-friendly society for all. Information and support for dyslexia and dyspraxia: **bdadyslexia.org.uk**

Dyslexia Foundation

Services for people with dyslexia and advice and information for employment and education: **dyslexia-help.org**

Made by Dyslexia

Community aimed at changing attitudes around dyslexia. Resources and information for employers, teachers and students: **madebydyslexia.org**

Dyslexia Association of London

Resources, information and advice. Adult dyslexia support group based in London: **dyslexialondon.org**

Dyspraxia

Dyspraxia Foundation

Charity offering advice, information, news, events and membership options: **dyspraxiafoundation.org.uk**

British Dyslexia Association

A membership organisation working to achieve a dyslexia-friendly society for all. Information and support for dyslexia and dyspraxia: bdadyslexia.org.uk/dyslexia/neurodiversity-and-co-occurring-differences/dyspraxia

Dyscalculia

British Dyslexia Association

A membership organisation working to achieve a dyslexia-friendly society for all. Information and support for dyslexia and dyspraxia: **bdadyslexia.org.uk/dyscalculia**

The Dyscalculia Information Centre

Information and resources for adults and children with dyscalculia: **dyscalculia.me.uk**

National Numeracy

Information on how to recognise the signs of dyscalculia in children and adults: nationalnumeracy.org.uk/news/what-dyscalculia-and-how-can-it-be-spotted-and-supportedchildren-and-adults

Dyscalculia Network

Information and peer support for those with dyscalculia: dyscalculianetwork.com/dyscalculia-for-adults/

Dysgraphia

International Dyslexia Association

Information on the signs, diagnosis and management of dysgraphia: <u>dyslexiaida.org/understanding-dysgraphia/</u>

Dyslexia – SPELD Foundation

Guidance on recognising the signs and supporting people with dysgraphia: dsf.net.au/learning-difficulties/dysgraphia/what-is-dysgraphia

Tourette Syndrome

Tourette's Action UK

Information and community support for those with Tourette's: **tourettes-action.org.uk**

Tourette Association of America

Information, webinars and resources for those living with Tourette's and those supporting someone with Tourette's: **tourette.org**

Supportive software

Literacy support

Windows Dictate Dictating programme

Dragon Dictating programme

Speech to Text / Text to Speech

There are many available, for example, Microsoft Speak, Read&Write, Apple Dictation or the Gboard app.

Grammarly Grammar support tool

Read&Write Literacy support

Organisational support

Asana

Project management software

Trello Project management software

Tiimo Daily planning tool designed for neurodivergent people

Thruday

Visual planning app designed for neurodivergent people

Inspiration Visual thinking tool

Other

MindManager Mind-mapping tool

Miro or **Mural** Mind-mapping tools

Smart pens For example, Echo or Livescribe

reMarkable Digital notepad

Artificial Intelligence (AI) tools

Including AI chatbots and communication tools

References

- 1 https://www.theiet.org/media/paqhz25y/neurodiversity-in-engineering-and-technology-full-report.pdf (IET, 'Neurodiversity in engineering and technology', November 2023)
- 2 Workplace Neurodiversity | The Institute of Leadership (Institute of Leadership, 2020)
- 3 Equality Act 2010 (legislation.gov.uk) (GOV UK, Equality Act, 2010)
- 4 https://www.ambitiousaboutautism.org.uk/information-about-autism/behaviour/meltdowns-and-shutdowns (Ambitious about Autism, 'Meltdowns and shutdowns')
- 5 https://geniuswithin.org/what-is-neurodiversity/ (Genius Within, 'What does neurodiversity mean?')
- 6 https://www.ambitiousaboutautism.org.uk/information-about-autism/behaviour/meltdowns-and-shutdowns (Ambitious about Autism, 'Meltdowns and shutdowns')
- 7 Attention deficit hyperactivity disorder (ADHD) NHS (www.nhs.uk) (NHS, 2021)
- 8 ADHD Incidence Childhood and Adult ADHD incidence rates (adhduk.co.uk) (ADHD UK, 2022)
- 9 The positive aspects of attention deficit hyperactivity disorder: a qualitative investigation of successful adults with ADHD | ADHD Attention Deficit and Hyperactivity Disorders (springer.com) (Sedgwick et. Al., 2018)
- 10 https://www.atkinsrealis.com/~/media/Files/A/atkinsrealis/documents/beyond-engineering/neuroinclusive-office-design. pdf (AtkinsRéalis, 'Neuroinclusive Office Design – Version 3.0', February 2024)
- 11 What is autism (National Autistic Society, 2024)
- 12 What is autism (National Autistic Society, 2024)
- 13 What is autism (National Autistic Society, 2024)
- 14 Autism strengths & Challenges | Embrace Autism (embrace-autism.com) (Embrace Autism, 'Autism strengths and challenges' 2018)
- 15 The Relationship Between Subthreshold Autistic Traits, Ambiguous Figure Perception and Divergent Thinking | Journal of Autism and Developmental Disorders (springer.com) (Best. C et Al, 'The Relationship Between Subthreshold Autistic Traits, Ambiguous Figure Perception and Divergent Thinking', 2015)
- 16 https://neurodiversityinbusiness.org/research/ (Neurodiversity at Work 2023', Neurodiversity in Business)
- 17 https://www.atkinsrealis.com/~/media/Files/A/atkinsrealis/documents/beyond-engineering/neuroinclusive-office-design. pdf (AtkinsRéalis, 'Neuroinclusive Office Design – Version 3.0', February 2024)
- 18 DYSLEXIA | meaning Cambridge Learner's Dictionary (Cambridge University Press, 2024)
- 19 British Dyslexia Association (bdadyslexia.org.uk) (British Dyslexia Foundation, 2023)
- 20 https://www.dyslexiauk.co.uk/the-link-between-dyslexia-and-entrepreneurial-success/#:~:text=According%20to%20a%20 study%20by,general%20population%20that%20has%20dyslexia.
- 21 https://www.atkinsrealis.com/~/media/Files/A/atkinsrealis/documents/beyond-engineering/neuroinclusive-office-design. pdf (AtkinsRéalis, 'Neuroinclusive Office Design – Version 3.0', February 2024)
- 22 Dyscalculia British Dyslexia Association (bdadyslexia.org.uk) (British Dyslexia Foundation, 2023)
- 23 Dyscalculia British Dyslexia Association (bdadyslexia.org.uk) (British Dyslexia Foundation, 2023)
- 24 Dysgraphia: What it is, types, symptoms, testing, and more (medicalnewstoday.com) (Medical News Today, 2020)
- 25 Dysgraphia: What It Is, Symptoms, Diagnosis & Treatment (clevelandclinic.org) (Cleveland Clinic, 2022)
- 26 Dyspraxia in adults NHS (www.nhs.uk) (NHS, 2020)
- 27 https://www.learningdisabilities.org.uk/learning-disabilities/a-to-z/d/dyspraxia (Foundation for People with Learning Disabilities, 'Dyspraxia', 2024)
- 28 Find out about TS (tourettes-action.org.uk) (Tourettes Action, 2024)
- 29 Find out about TS (tourettes-action.org.uk) (Tourettes Action, 2024)
- 30 Strengths of Tourette Syndrome » Movement Disorders & Neurorestoration Program NORMAN FIXEL INSTITUTE for NEUROLOGICAL DISEASES » UF Health » University of Florida (UFHealth, 'Strengths of Tourette Syndrome', 2020)

- 31 What is Synaesthesia? | Causes & Symptoms | Exceptional Individuals (Exceptional Individuals, What is Synaesthesia? 2023)
- 32 Synaesthesia: the prevalence of atypical cross-modal experiences. Perception. (Simner et al, 2006)
- 33 Synaesthesia: Definition, Examples, Causes, Symptoms, and Treatment (healthline.com) (Watson. K, What Is Synaesthesia?, 2018)
- 34 What is Synaesthesia? | Causes & Symptoms | Exceptional Individuals (Exceptional Individuals, What is Synaesthesia strengths, 2023)
- 35 What is Hyperlexia? | Causes & Symptoms | Exceptional Individuals (Exceptional Individuals, Hyperlexia, 2023)
- 36 Hyperlexia: What It Means, What the Symptoms Are, and More (webmd.com) (WebMD, Hyperlexia, 2023)
- 37 Employment Activities and Experiences of Adults with High-Functioning Autism and Asperger's Disorder | Journal of Autism and Developmental Disorders (springer.com) (Baldwin et. Al, 'Employment Activities and Experiences of Adults with High-Functioning Autism and Asperger's Disorder' 2014)
- 38 Neurodiversity: the little-known superpower (kornferry.com) (Korn Ferry, 'Neurodiversity: the little-known superpower', 2022)
- 39 randstad-enterprise-made-by-dyslexia-dyslexic-thinkers-research.pdf (madebydyslexia.org) (Made by Dyslexia, 'dyslexic thinkers: recruiting the unique talent your company needs', 2023)



Contact information

London, UK

- T +44 (0)20 7344 8460
- E faradaycentre@ietvenues.co.uk

Stevenage, UK

- T +44 (0)1438 313311
- E postmaster@theiet.org

Beijing, China*

- T +86 10 6566 4687
- E china@theiet.org
- W theiet.org.cn

Hong Kong SAR

- T +852 2521 2140
- E infoAP@theiet.org

Bengaluru, India

- T +91 80 4089 2222
- E india@theiet.in
- W theiet.in

New Jersey, USA

- T +1 (732) 321 5575
- E ietusa@theiet.org
- W americas.theiet.org

@ThelET 💥 📑 🕨 in 🞯 👰

theiet.org

The Institution of Engineering and Technology is registered as a Charity in England and Wales (No. 211014) and Scotland (No. SC038698). The Institution of Engineering and Technology, Futures Place, Kings Way, Stevenage, Hertfordshire, SG1 2UA, United Kingdom.

*A subsidiary of IET Services Ltd.