

## Accessibility

The Cambridge Dictionary defines accessibility as “the quality or characteristic of something that makes it possible to approach, enter, or use it”.

If we are taking this into a work context, this means making sure that all staff and PGR student experiences are as equitable as possible- this does not mean giving another person an advantage. For more information on this, please see the [Social Model of Disability](#).

It is important that we not only consider how work materials (including learning materials), emails, meetings, recordings are accessible to all, **but also how to make interactions accessible to all i.e., inclusive of diversity, disability, and neurodiversity.**

There are many aspects in terms of accessibility, but as this resource hub is centred around neurodiversity and supporting neurodivergent people, the focus will be on that.

## Neurodiversity & Accessibility

[Dr Elliott Spaeth and Leigh Abbott provided a talk](#) on how neurodivergent students and staff process information and work, with guidance on creating an inclusive and accessible working environment/place of study. Information taken from this talk is below. **Please note that these are some examples and that this list is not exhaustive.**

Things to consider in terms of neurodiversity are that some neurodivergent people:

- May focus better with a background task to calm their mind (commonly seen in those with ADHD);
- May find working in groups actively detrimental to their learning/employment (commonly seen in autistic people);
- Might understand things differently to what you intended (the nuances of language, inferences, literal interpretations);
- May not comply with expected social conventions or behave in a ‘typical’ manner or pick up on social cues;
- Engage with learning/tasks very obviously (or not obviously at all);
- Find it hard to process large chunks of text and/or mathematical information (commonly seen in those with dyslexia/dyscalculia).

## What can I do to create an inclusive and accessible workplace?

Dr Elliott Spaeth and Leigh Abbott advise...

### **Allowing different mannerisms**

Embracing different mannerisms will enhance diversity.

### **Asking the person or group of people’s communication preference**

This could be communication via email, or prefer meetings to go over ideas etc., as some neurodivergent people may struggle with written/verbal communication.

### **Allow sensory/fidget tools and/or people to multitask in and out of meetings**

This can help some neurodivergent people concentrate on the meeting.

**Hand out slides/meeting notes/agendas in advance of the meeting**

This will allow people to process the information and prepare for questions.

**Allowing people to conserve energy**

This could be to allow frequent breaks, or long breaks if a person has been in back-to-back virtual/in-person meetings/contact. Some neurodivergent people have sensory sensitivity or may feel overwhelmed from lots of communication, so allowing breaks is beneficial both to the person and for the productivity.

**Be mindful that not everyone uses eye contact while communicating**

Some neurodivergent people struggle to maintain eye contact, so if you meet a person face-to-face, do not be perturbed if they do not maintain eye contact during a conversation. Not drawing attention to this, and simply accepting this, will ease the pressure of feeling like the neurodivergent person needs to act “normal”. In addition, some neurodivergent people find that not maintaining eye contact allows them to concentrate more closely on what is being said.

**Allow incomplete thoughts**

If a person is in the middle of thinking, allow that person to think, and if you can see that they are struggling, **ask** them would they like help instead of taking over. If you take over, you may make the person feel like their thoughts/contributions are not valued.

**Announce your adjustments**

If you have any adjustments, consider announcing them so that neurodivergent people will also know it's a safe space to announce theirs too.

**Apply reasonable adjustments**

Most importantly, if someone requests adjustments, please listen, and try to apply them in practice. If an adjustment is unclear, it may be worth speaking to them to ensure that adjustments are made.

**Attend training opportunities or using resources online**

If you would like to learn more, it is beneficial to undertake training from disability and neurodiversity organisations as well as using resources online, such as this one!

In addition, a very helpful webpages include the [Supporting Disabled Colleagues and Prospective Staff webpage](#) and the [Support for Disabled and Neurodivergent Colleagues portal](#). These webpages cover many topics including declaring a disability, Reasonable Adjustment Passports, access to work schemes, and lots of different guidance in relation to accessibility!

**Creating Accessible Content**

As a member of staff or PGR student, it is advised to follow the [Digital Accessibility Guidelines](#) and for accessibility measures.

[Dr Leon Franzen also provided a talk on creating accessible and dyslexia-friendly content](#)

that you may want to consider in your own working practices. He suggests the following:

- Appropriate font size;
- **Bold** for highlighting;
- NO serifs;
- NO italics;
- NO underlining;
- Use Arial, Helvetica, Verdana, Calibri;
- Consider specific fonts such as [OpenDyslexic](#).

### **Assistive Technology for PGR Students**

To be given assistive technology, you will have to go to the Disability Service and be evaluated, please see [Disclosure of a Condition](#) for more information.

If the University has approved your request for use of assistive technology, there is also a hub that you can visit that provides services such as training in assistive software, assessing software packages, and facilitating loans for assistive technology. Please see [Assistive Technology](#) for further details.

### **'How to' Set-up for Labs**

[Professor Jay Dolmage's talk on Accessible Research Laboratories](#) provided ample resources on creating accessible spaces for researchers working in laboratories. He suggests following [Prema & Dhand \(2019\) Inclusion and Accessibility in STEM Education recommendations](#). In relation to neurodiversity, we suggest the following from Prema and Dhand's recommendations to add/use within the lab:

- Wall phones; white boards; SMART boards; and enlarged screens
- Natural and artificial lighting sources
- Assistive and adaptive technologies

If you are a lecturer/researcher supervising students (including PGR students), [Sukhai et al. \(2014\) paper on Creating an Accessible Science Laboratory Environment for Students with Disabilities](#) recommend the following:

- Provide a selection of tools and equipment (including those used to prepare experiments and gather and visualise data) to incorporate a Universal Design for Learning approach. Please see [Universal Design for Learning](#) for more information.

- Removing difficult human tasks where possible and using digital tools instead so that access can be customised to the learner.
- Convert to all-digital lab manuals and notebooks so that researchers and students can use speech-to-text software, change fonts, font sizes, contrast, and can access materials outside of the lab when they need to.
- To be aware of what available assistive technology resources are within the University (or at individual School level) and work with Disability Services on campus to determine the most applicable and creative uses for these technologies
- Be willing to make accommodations within a lab setting and work with the researcher/student and signpost to mentorship/support, if applicable
- Create templates or exemplars for specific pieces of work.
- Anticipate that researchers/students have diverse needs so that when support is needed from a researcher/learner it isn't treated like an unwelcome surprise.

Professor Jay Dolmage has also created an online resource that covers creating accessible laboratories, please see: [Universal Design, Places to Start- in a laboratory setting](#).

### **Guidance for In-person Seminars/Meetings and Conferences/Events**

For both in-person seminars/meetings and conferences/events, we believe the same set of guidance in the [Neurodiversity & Accessibility](#) and the [Creating Accessible Content](#) sections of the hub applies to create an accessible and inclusive environment.

If you are a lecturer and want to learn more about creating accessible seminars for your PGR students, please read Professor Jay Dolmage's online resource: [Universal Design, Places to Start- questions and discussions](#).

The Equality & Diversity team have also created a page called [Supporting Disabled Colleagues and Prospective Staff](#). On this webpage, there is a section on in-person meetings that you may want to implement in your own practice.

In addition, we recommend using the University's [Accessible Events Checklist](#) and reading through the [Embedding Equality and Diversity into University-funded Conferences and Events](#). Although this is primarily aimed at events and conferences, the guidance can be used for in-person seminars/meetings too.

If you are a PGR student, you can also read [PGR Student Groups](#) for further details.

## Creating Groups

There are many reasons why neurodivergent people may feel that group work is difficult for them, which are discussed in [Challenges Some Neurodivergent People Face](#).

We recommend using the suggestions in the [Neurodiversity & Accessibility](#) section, along with the [Creating Accessible Content](#) in the first instance, and to also think about the following when creating groups; small or large.

### **Clear communication is key**

Clearly explain the intention of the group and avoid ambiguous language.

### **Set out clear tasks and expectations**

Having clear goals, tasks, and expectations is key for there to be no misunderstanding between group members.

### **Allocate tasks or roles to members within the team**

Ask each team member their preferred role or task within the team and allocate it to them or support the team to allocate among themselves. This will avoid ambiguity and one person completing tasks which are not theirs to complete.

### **Allow different modes of communication to contribute to the group**

If a person is better at written communication or verbal communication to contribute to the group, allow that person to have their preferred method of communication.

### **If the group is online, allow cameras to be switched off**

Some neurodivergent have sensory overload from lots of communication/social interaction or can feel exhausted from [masking](#), therefore being able to have the camera switched off will enable group members to fully participate and not be anxious during group meetings.

If you are a supervisor/lecturer, please read [Creating Groups for PGR Students](#).

If you are a PGR student, you can also read [PGR Student Groups](#) for further details.

## Online Set-ups and Communication

The [Consider Meeting Accessibility Infographic](#) was created by Leigh Abbott and Anna Morris and approved by the SCS VOICE committee.

The University also has created a guidance of navigating online meetings. You can access it here: [Online Meeting Guidance](#).

## Creating groups for PGR students

We recommend reading [Creating Groups](#) and [PGR Student Groups](#) for advice on creating groups in the first instance, in addition to considering the following outlined by [Dr Leon Franzen's talk on accessibility and neurodiversity](#).

### **Consider different learning styles**

This is especially important in embedding a [Universal Design for Learning](#).

**Set clear & tangible goals**

As they say, clarity is key! Tangible goals with a set deadline are also easier for students to follow so that there is no ambiguity.

**Take time to explain new concepts or words**

If there are new concepts to the task within the group work, get in contact with the group to explain. In addition, facilitate drawing connections so that it's easily digestible for the students to understand.

**Communicate awareness that mistakes do happen**

Make it clear to the PGR student group that mistakes are common, and that you are available to support/guide on correcting the mistake.

**Offer range of tools**

Suggestions of different tools may help PGR students' progress easier and more efficiently in their group task.

**Cooperative note-taking pairs**

Depending on the group at hand, but you could suggest that there will be note-takers in the group that will disseminate the information out to the wider group.

**Get students to quantify their progress often**

Knowing that they are making meaningful progress is essential for self-confidence ([The Progress Principle by Teresa Amabile](#)).

If you notice that the PGR group is becoming stuck on a particular task, Dr Leon Franzen also recommends using one or more of the following.

**Think-pair-share ([Brent & Felder](#))**

If the group is becoming stuck, or needs to fuel ideas, you can suggest a pair-share where two members of the group pair to discuss ideas then reconvene and share those ideas to the larger group.

**Guided reciprocal peer questioning**

The students question each other using open-ended questions. These questions are used to generate more focused discussion.

**Thinking Aloud Pair Problem Solving (TAPPS)**

For information on this, please see [Active Learning](#), and go to page 4.

In addition, Professor Jay Dolmage has also created an online resource that covers creating groups for students, please see: [Universal Design, Places to Start- Group Work](#) for further information.