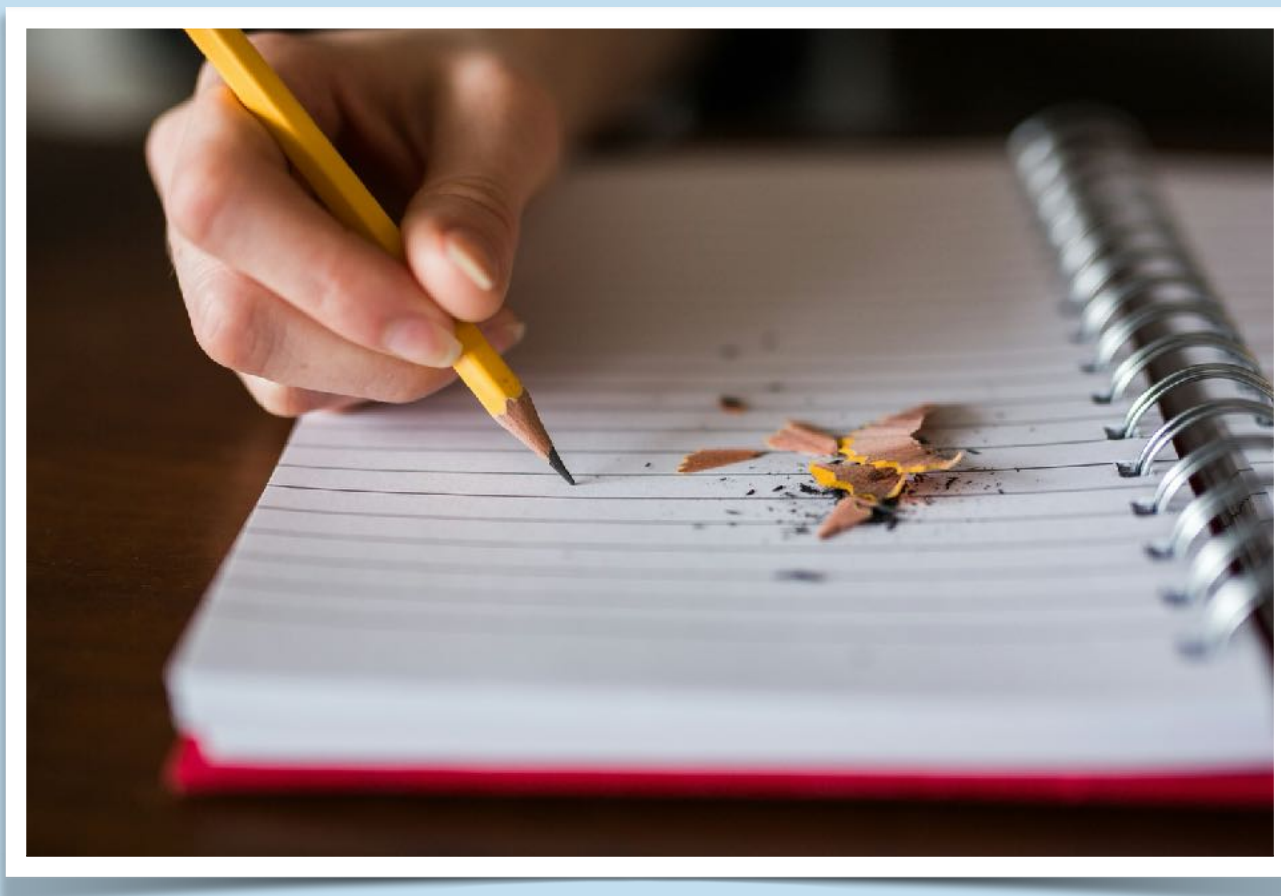


# Breaking barriers: Embracing neurodiversity in tech

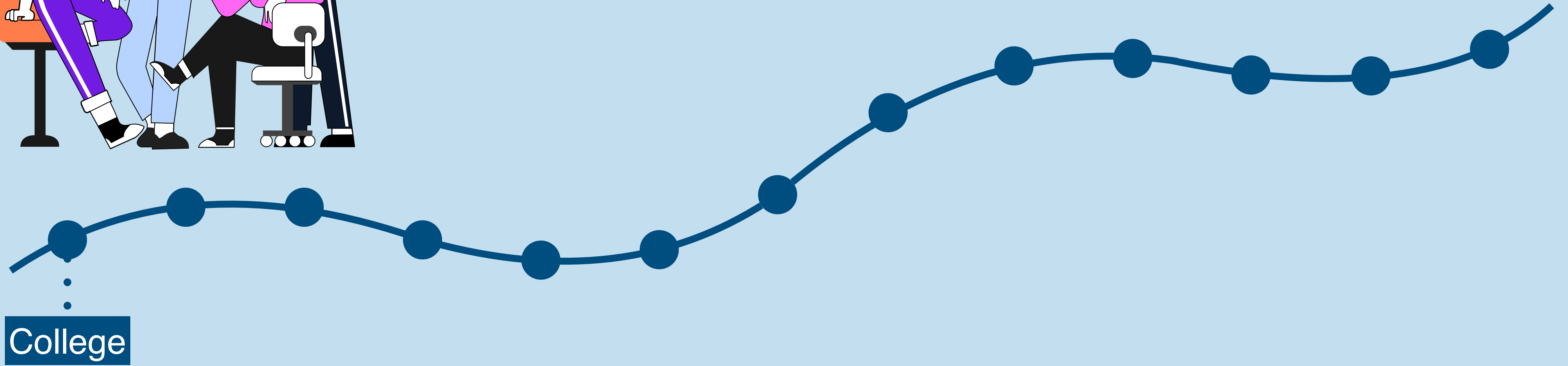
Jonathan Fielding / 5th November 2024 / LeadDev

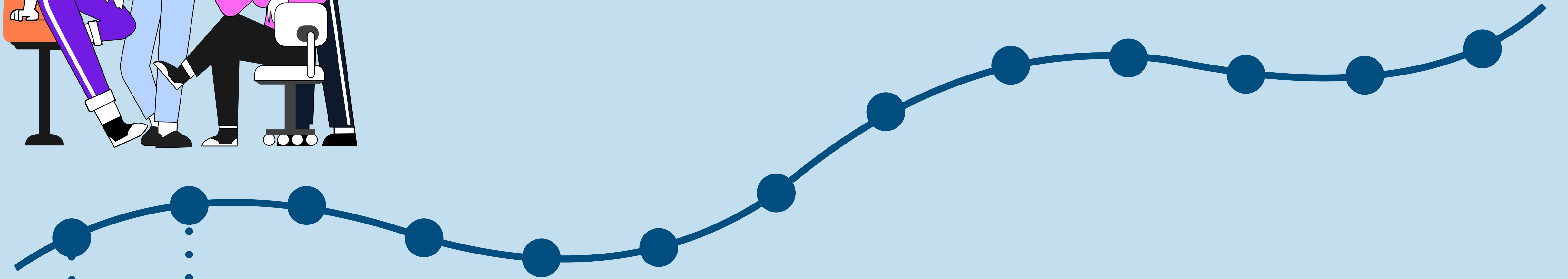






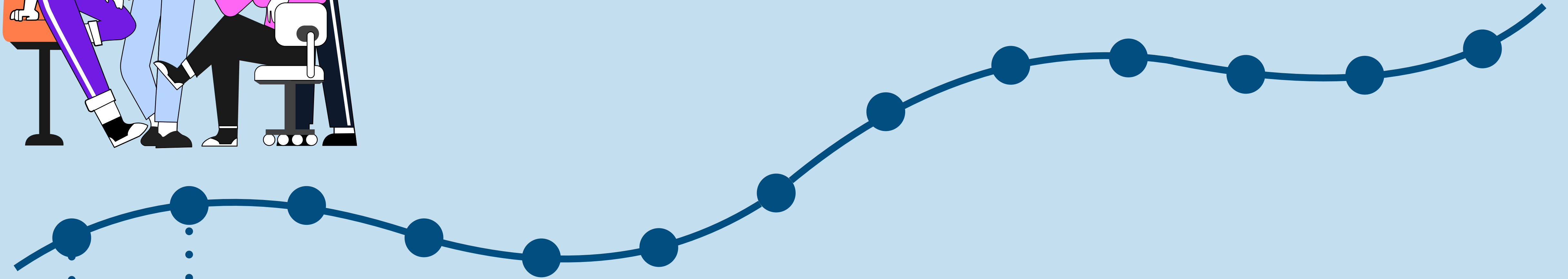






College

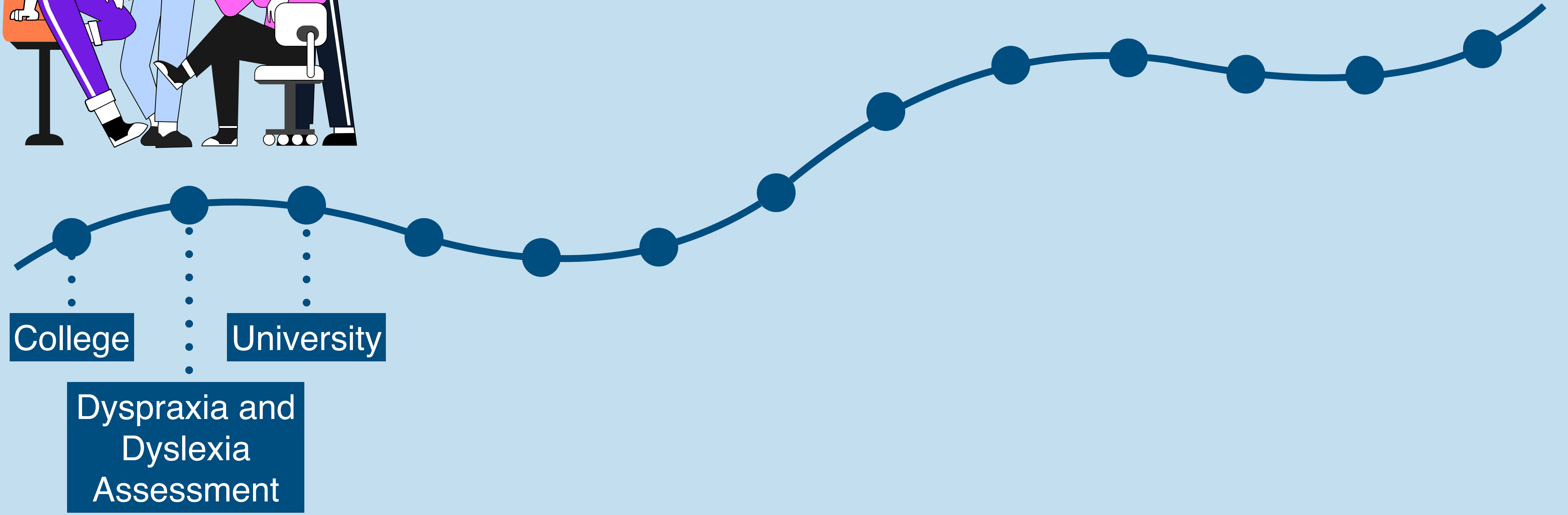
Dyspraxia and  
Dyslexia  
Assessment



College

Dyspraxia and  
Dyslexia  
Assessment

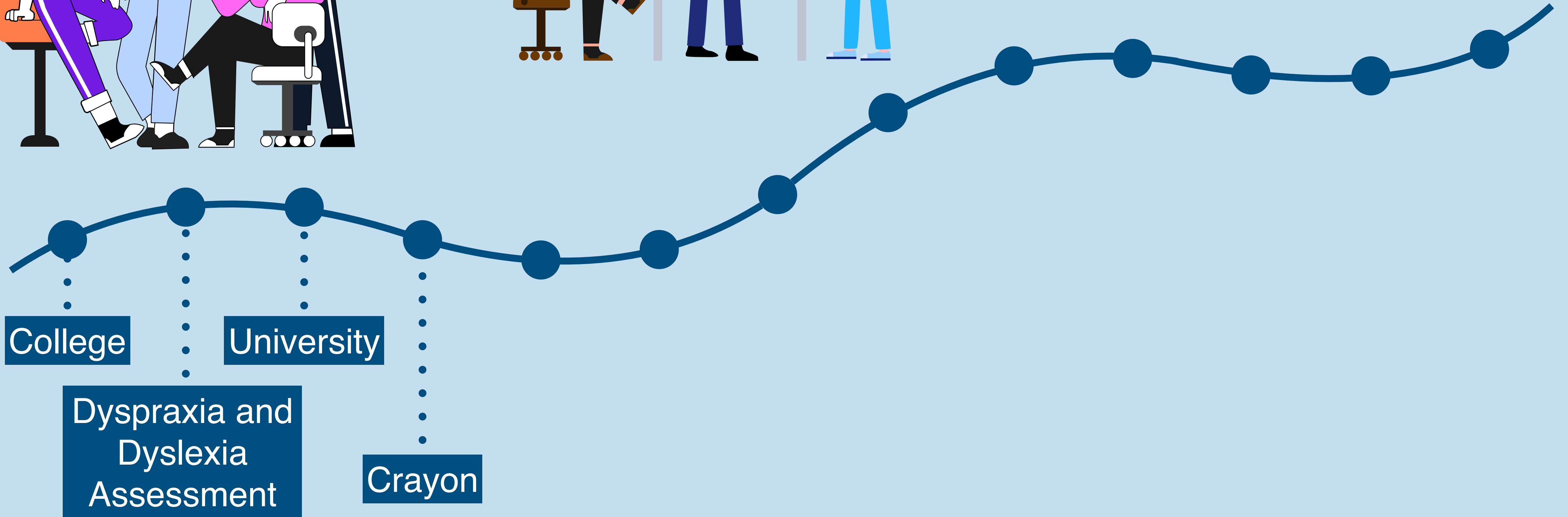




College

University

Dyspraxia and  
Dyslexia  
Assessment





College

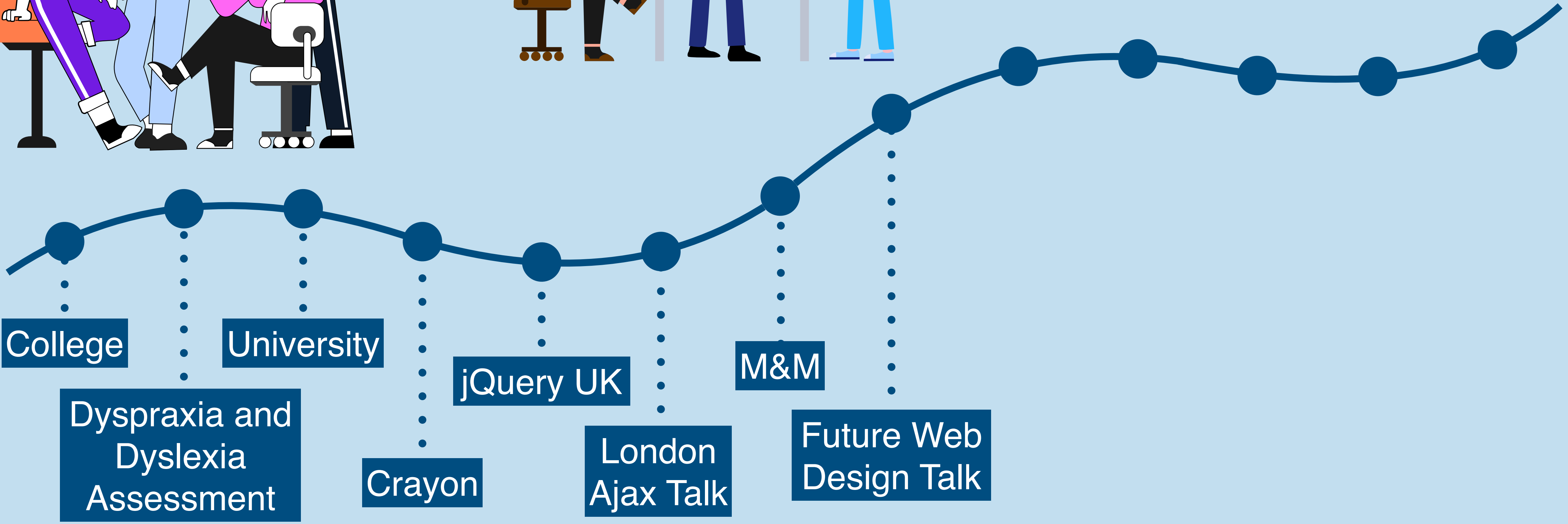
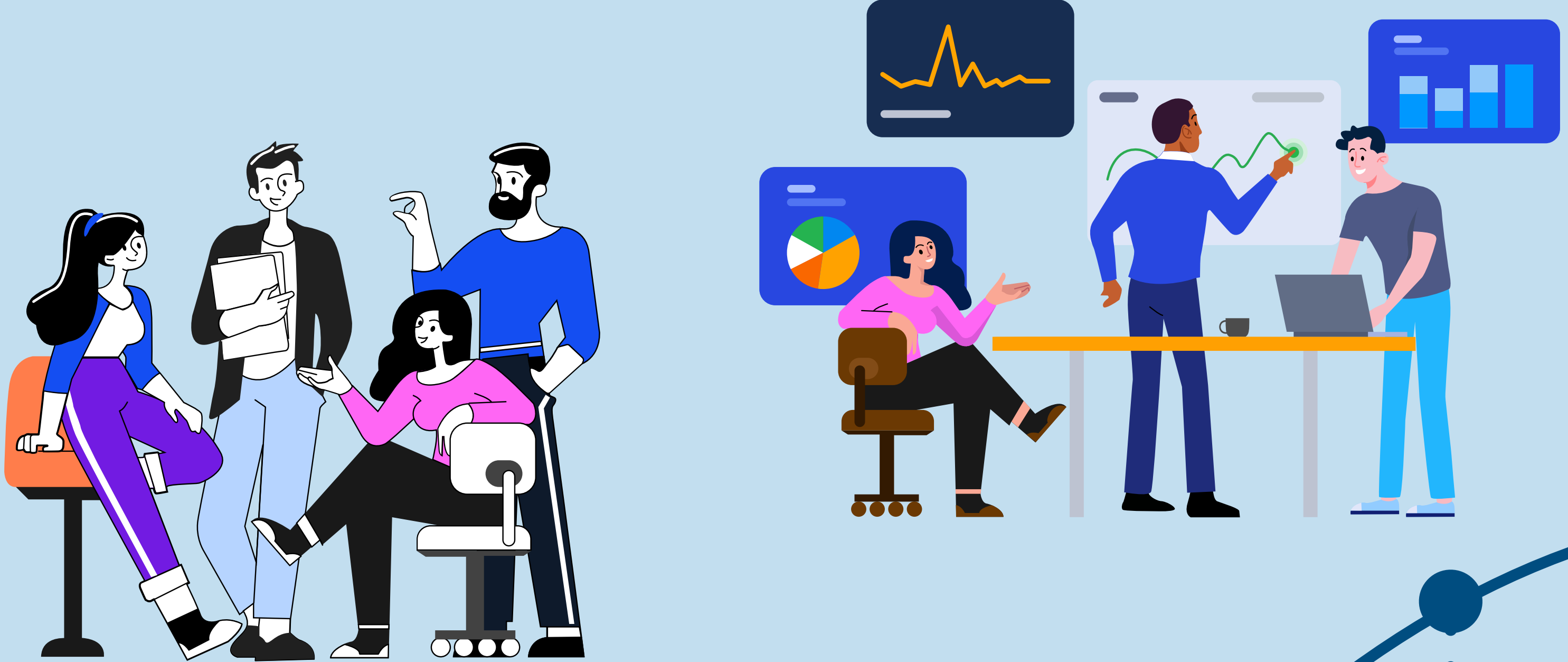
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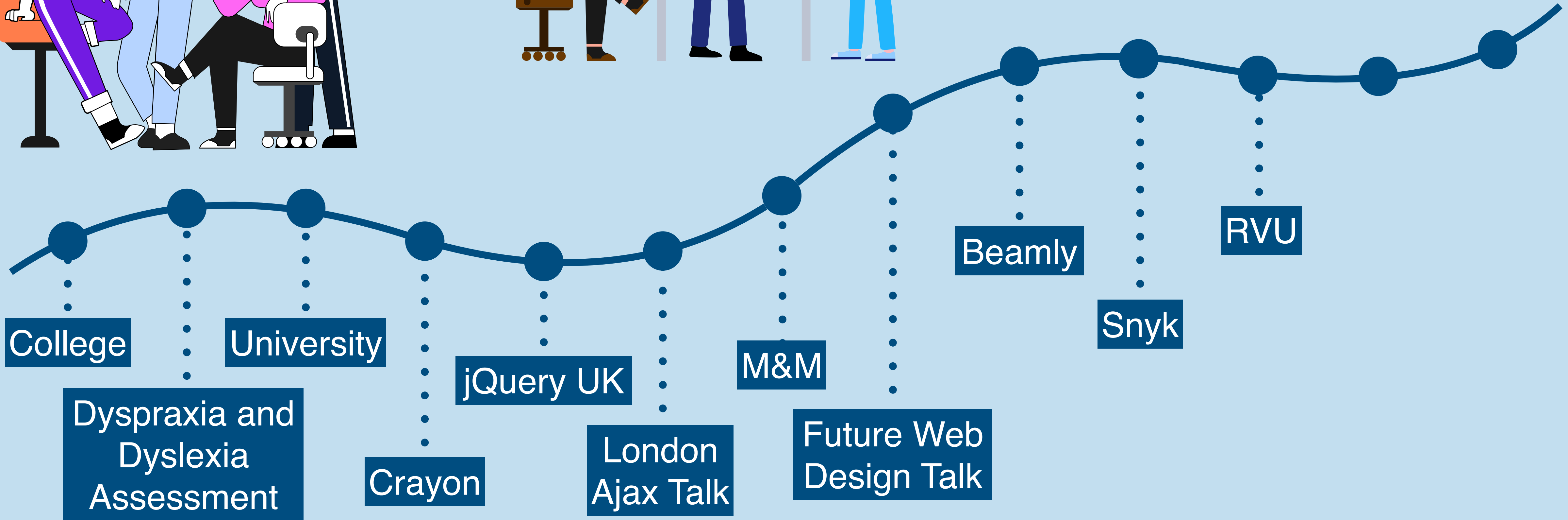
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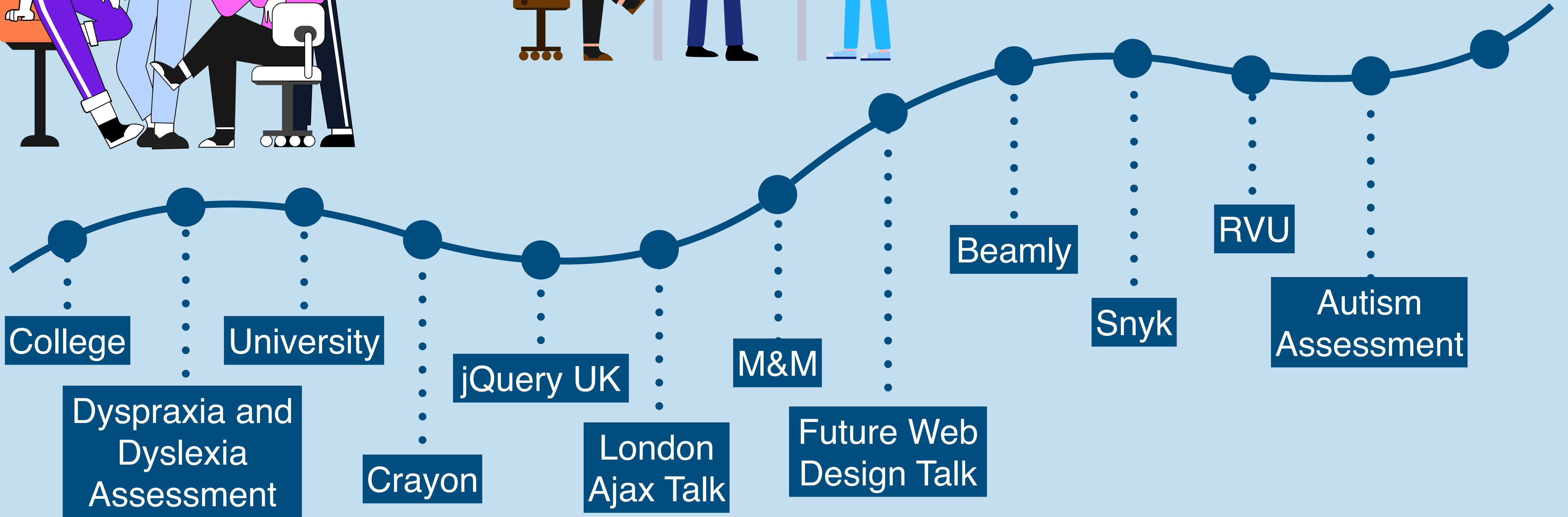
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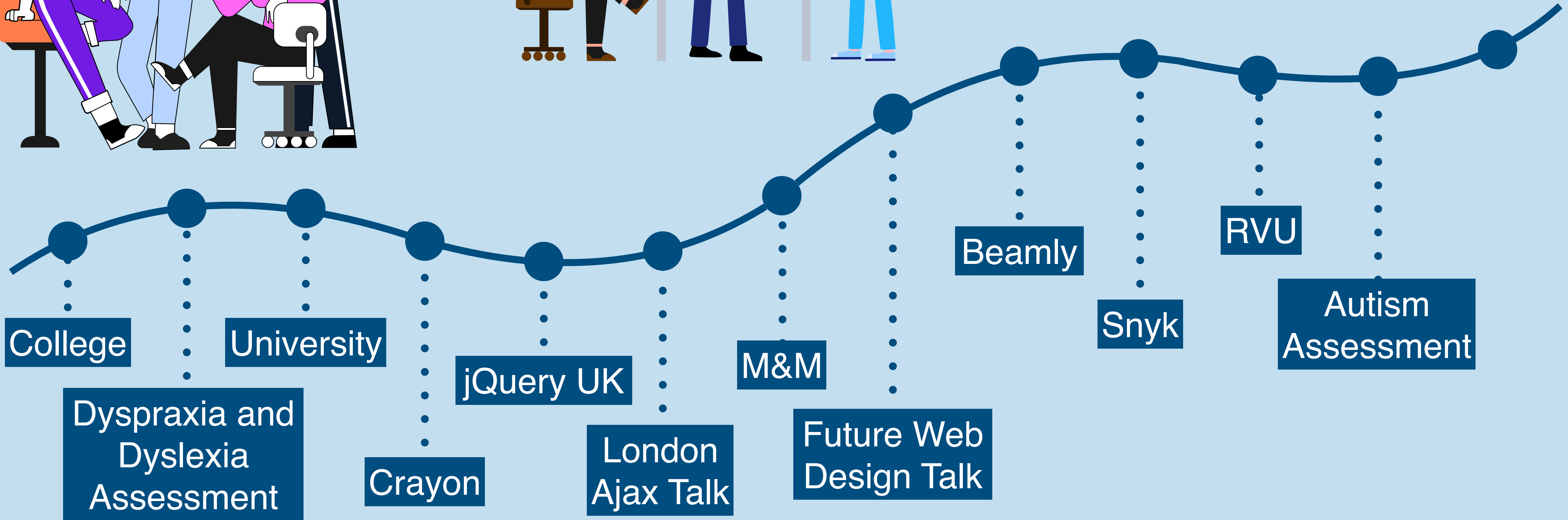
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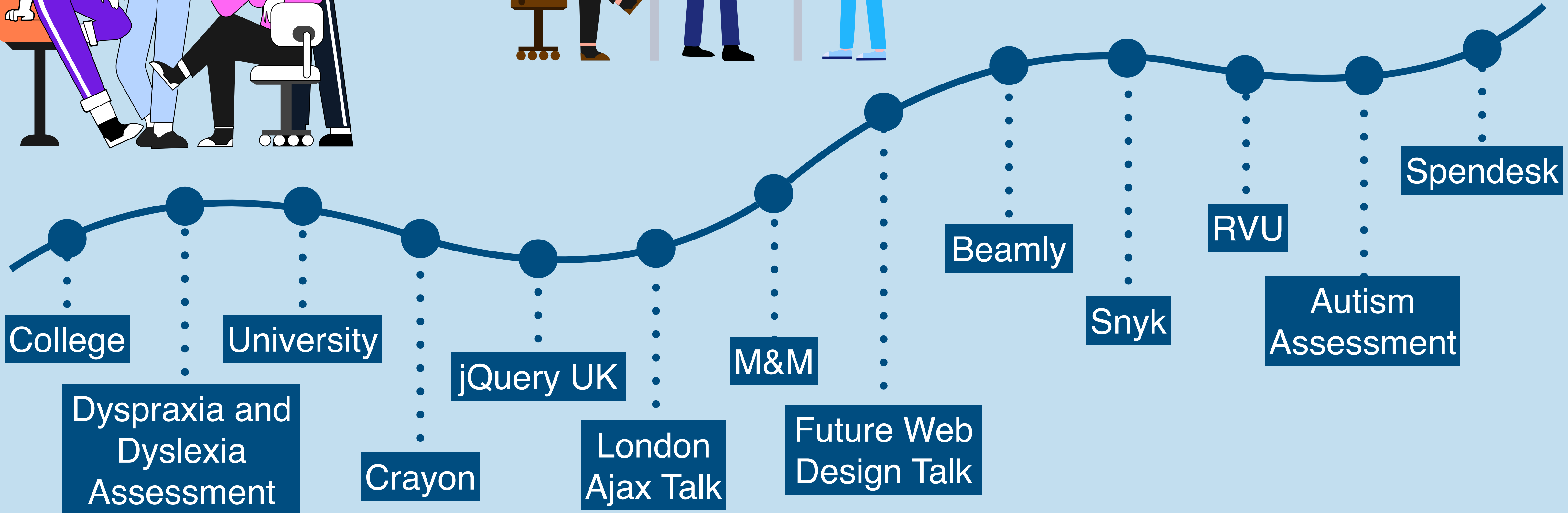














These conditions fall under the umbrella term  
of **Neurodiversity**



**So what is neurodiversity?**

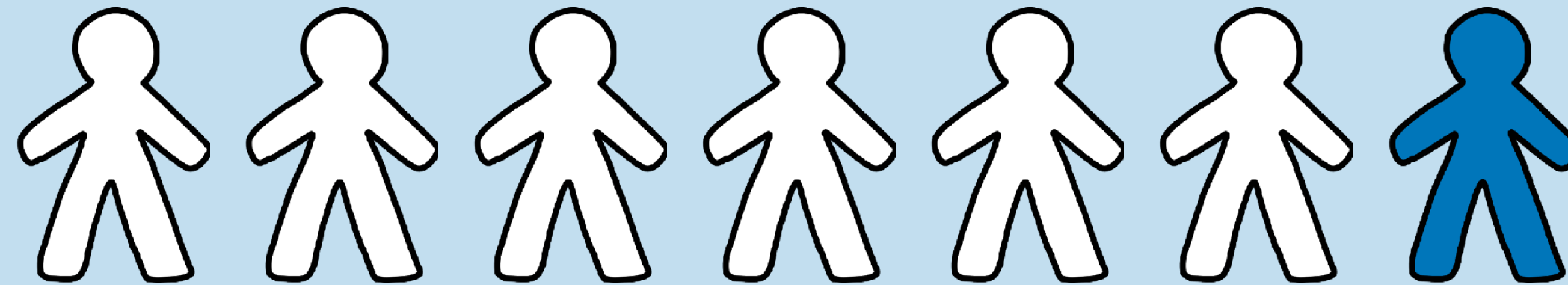


**So what is neurodiversity?**

“Neurodiversity describes the idea that people experience and interact with the world around them in many different ways; there is no one "right" way of thinking, learning, and behaving, and differences are not viewed as deficits.””

[Harvard Health - What is neurodiversity](#)

When people brains work differently from the *norm* they are referred to as **neurodivergent**

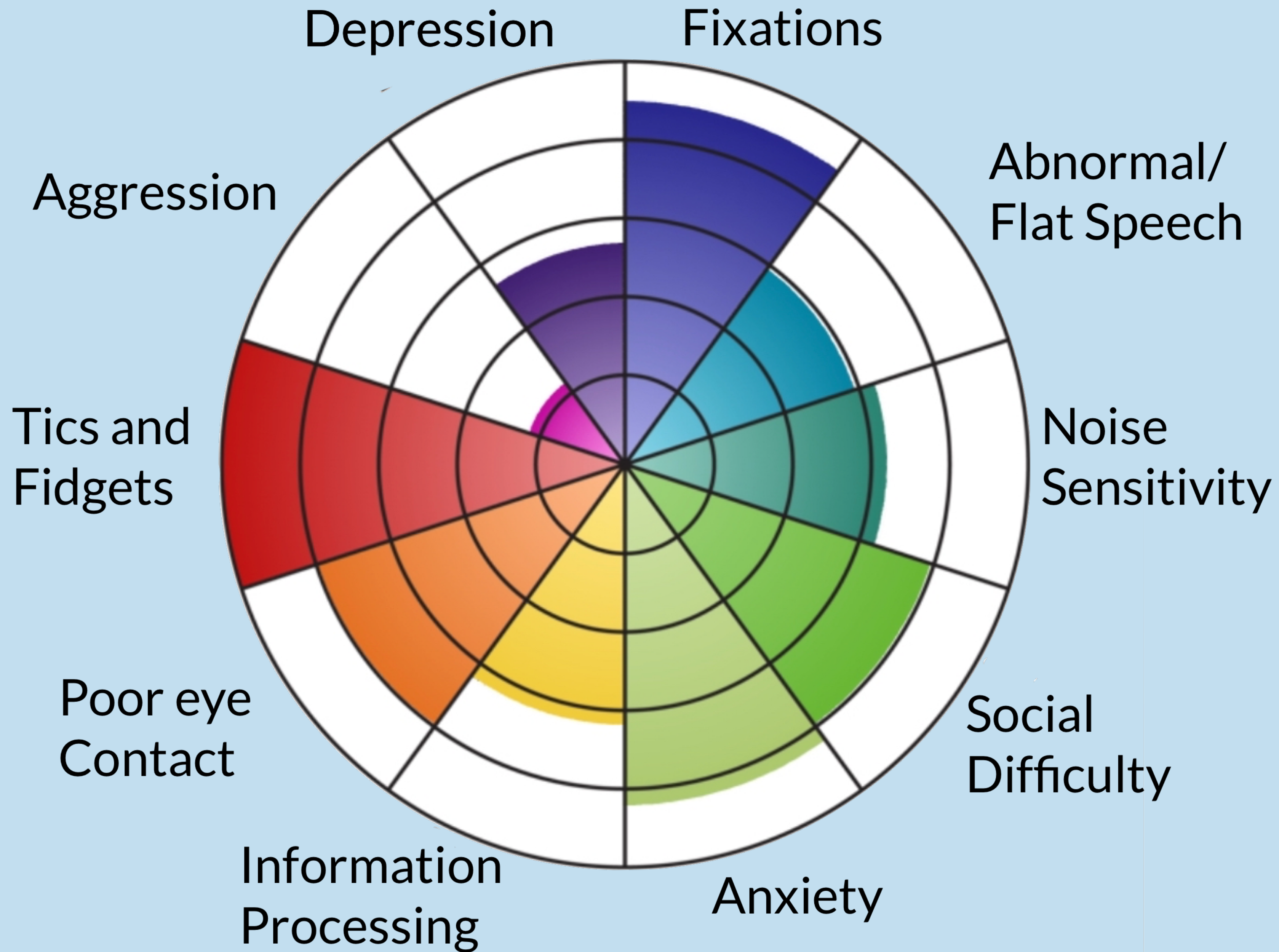


It is estimated that around 1 in 7 people are **neurodivergent** in the general population

If we look more specifically  
at workers in tech that number  
increases to **53%**



However only  
**3%**  
of tech workers disclose it





# Types of Neurodiversity

Today I am going to be focusing on talking about 4 common types of neurodivergence

**ADHD**

# ADHD

**Symptoms are categorised into two categories**

# ADHD

## **Symptoms are categorised into two categories**

### Inattentiveness

- having a short attention span and being easily distracted
- making careless mistakes
- appearing forgetful or losing things
- being unable to stick to tasks that are tedious or time-consuming
- appearing to be unable to listen to or carry out instructions
- having difficulty organising tasks

# ADHD

## **Symptoms are categorised into two categories**

### Hyperactivity and impulsiveness

- constantly fidgeting
- being unable to concentrate on tasks
- excessive talking and interrupting conversations
- being unable to wait their turn
- acting without thinking
- little or no sense of danger



# ADHD

## Stereotypes

Hyperactivity of running around the place

Interrupting conversations

Unable to concentrate on tasks

Being forgetful

## Reality

Internalised hyperactivity like a busy, noisy mind

Trying to work out social cues of when they can talk

Thinking about 5/6 things simultaneously and unable to prioritise

Making notes and reminders for that thing they absolutely must remember

# ADHD

## Strengths that can come from ADHD

Creativity

Hyper-focus

Risk tolerance

**Autism**

# Autism

Autism is a diagnosis given to people who may have challenges with:

- Communications and interactions with other people
- Understanding how other people think or feel
- Finding things like bright lights or loud noises overwhelming, stressful or uncomfortable
- Getting anxious or upset about unfamiliar situations and social events
- Taking longer to understand information
- Doing or thinking the same things over and over

# Autism

## Stereotypes

Wanting things to be done their way or no way

All autistic people are savants or possess exceptional talents

Autistic people lack empathy or emotion

## Reality

Struggling with situations outside of what they have 'prepared' for

Autistic people have a wide range of abilities, strengths and skills

Expressing or processing emotions differently does not mean a lack of

# Autism

## Strengths that can come from Autism

Logical and methodical thinking ability

Attention to detail

Passionate for their interests

**Dyslexia**

# Dyslexia

Dyslexia is a diagnosis given to people who may have challenges with:

- Reading and writing very slowly
- Having poor or inconsistent spelling
- Understanding information when told verbally, but having difficulty with information that's written down
- Planning and organisation



# Dyslexia

## Stereotypes

Dyslexic people can't read

Dyslexics just need to try harder

Dyslexia is a visual problem

## Reality

Dyslexia makes it difficult to decode and comprehend, not read

The type of instruction makes a difference, not the effort

Dyslexic people are no more likely to have vision problems than others

# Dyslexia

## Strengths that can come from Dyslexia

Good visual-spatial reasoning

Think outside of the box

Excel in areas that do not depend on reading, such as math and computers

# Developmental Coordination Disorder (Dyspraxia)

# Developmental Coordination Disorder (Dyspraxia)

Dyspraxia is a diagnosis given to people who may have challenges with:

- Co-ordination, balance and movement
- Learning new skills, thinking and remembering information
- Writing, typing, drawing and grasping small objects
- Managing emotions
- Time management, planning and organisational skill

# Developmental Coordination Disorder (Dyspraxia)

## Stereotypes

People with dyspraxia are just clumsy

People with dyspraxia have low intelligence

People with Dyspraxia are just disorganised

## Reality

Carefully walking everywhere but still bumping into and tripping over things

Struggles with fine motor skills does not equate a low intellect

Trying to keep everything in order and still having no clear “organisation”

# Developmental Coordination Disorder (Dyspraxia)

## Strengths that can come from Dyspraxia

Creative thinking

Excel at problem solving

Sensitive to the needs of others

# NEURODIVERGENT UMBRELLA\*

- ADHD
- ASPD
- BPD
- DYSLEXIA
- DYSPRAXIA
- PTSD
- DYSGRAPHIA
- DID & OSDD
- NPD
- CPTSD
- HSP
- SENSORY PROCESSING
- DYSCALCULIA
- BIPOLAR
- AUTISM
- GAD
- OCD
- TIC DISORDERS
- SCHIZOPHRENIA
- MISOPHONIA
- DOWN SYNDROME
- FASD
- EPILEPSY
- ABI/TBI
- HPD
- SYNESTHESIA

\*NON-EXHAUSTIVE LIST

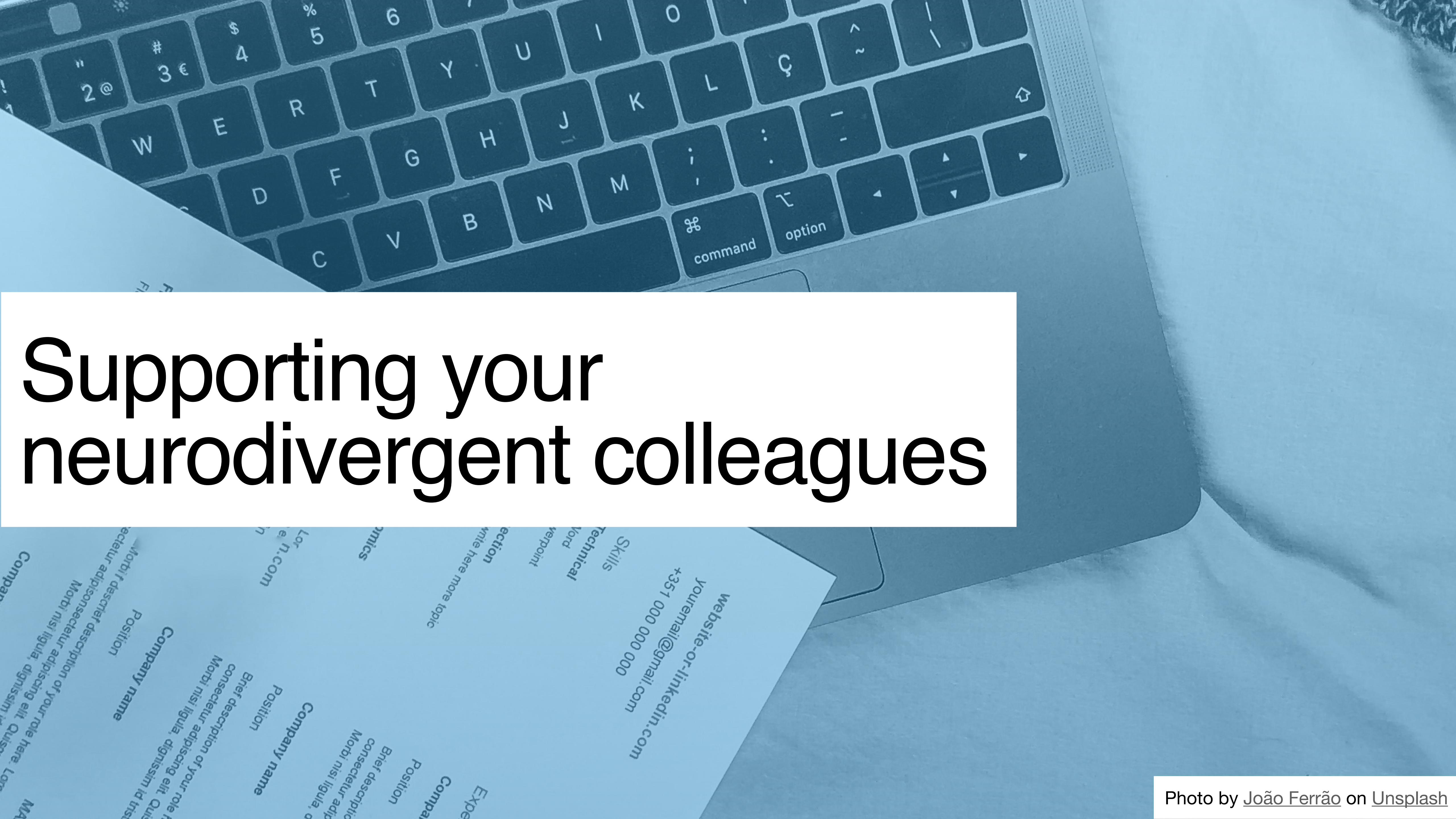
[www.livedexperienceeducator.com](http://www.livedexperienceeducator.com)

@livedexperienceeducator

A lot of these conditions can **co-exist**



Sometimes the symptoms a neurodivergent person might be hidden, this is referred to as **masking**



# Supporting your neurodivergent colleagues



Provide Psychological Safety

Provide a space  
where they feel safe  
to share about  
themselves



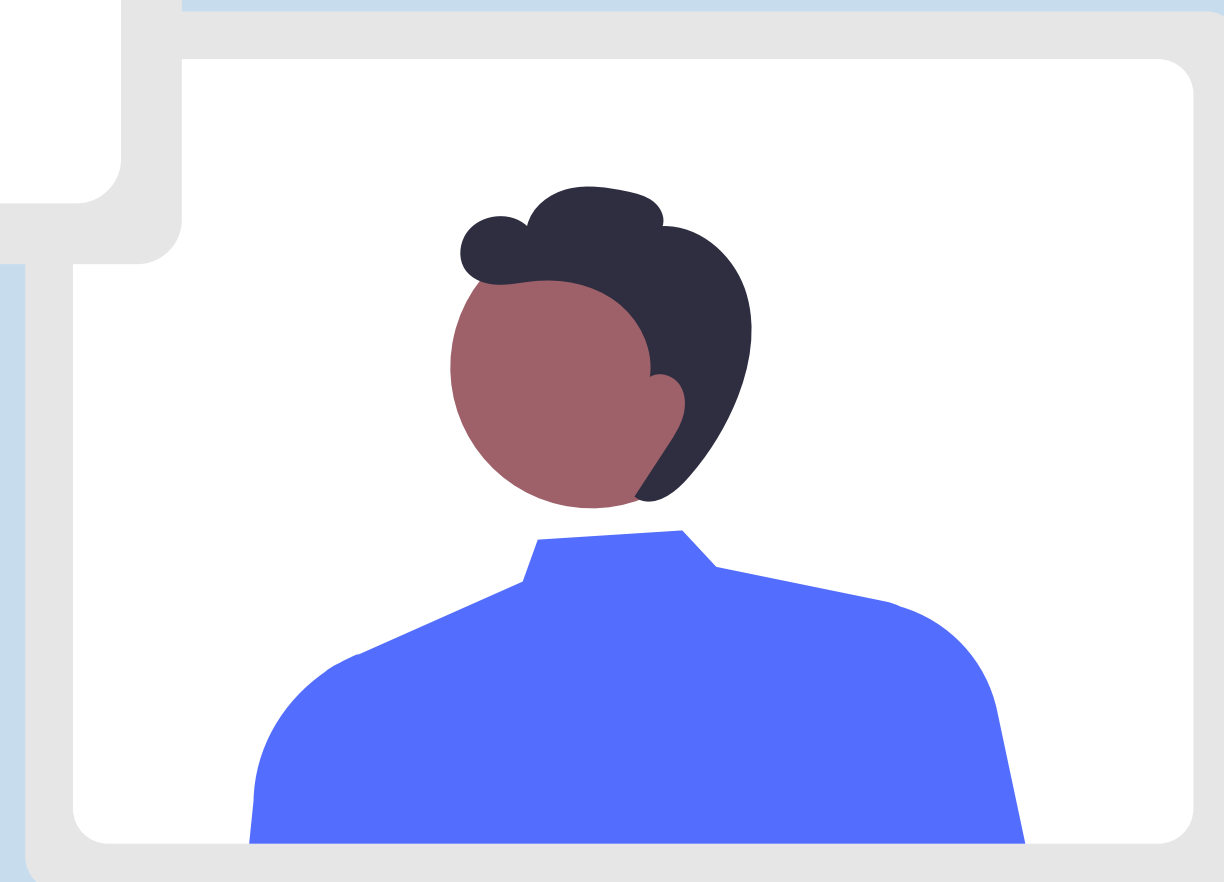
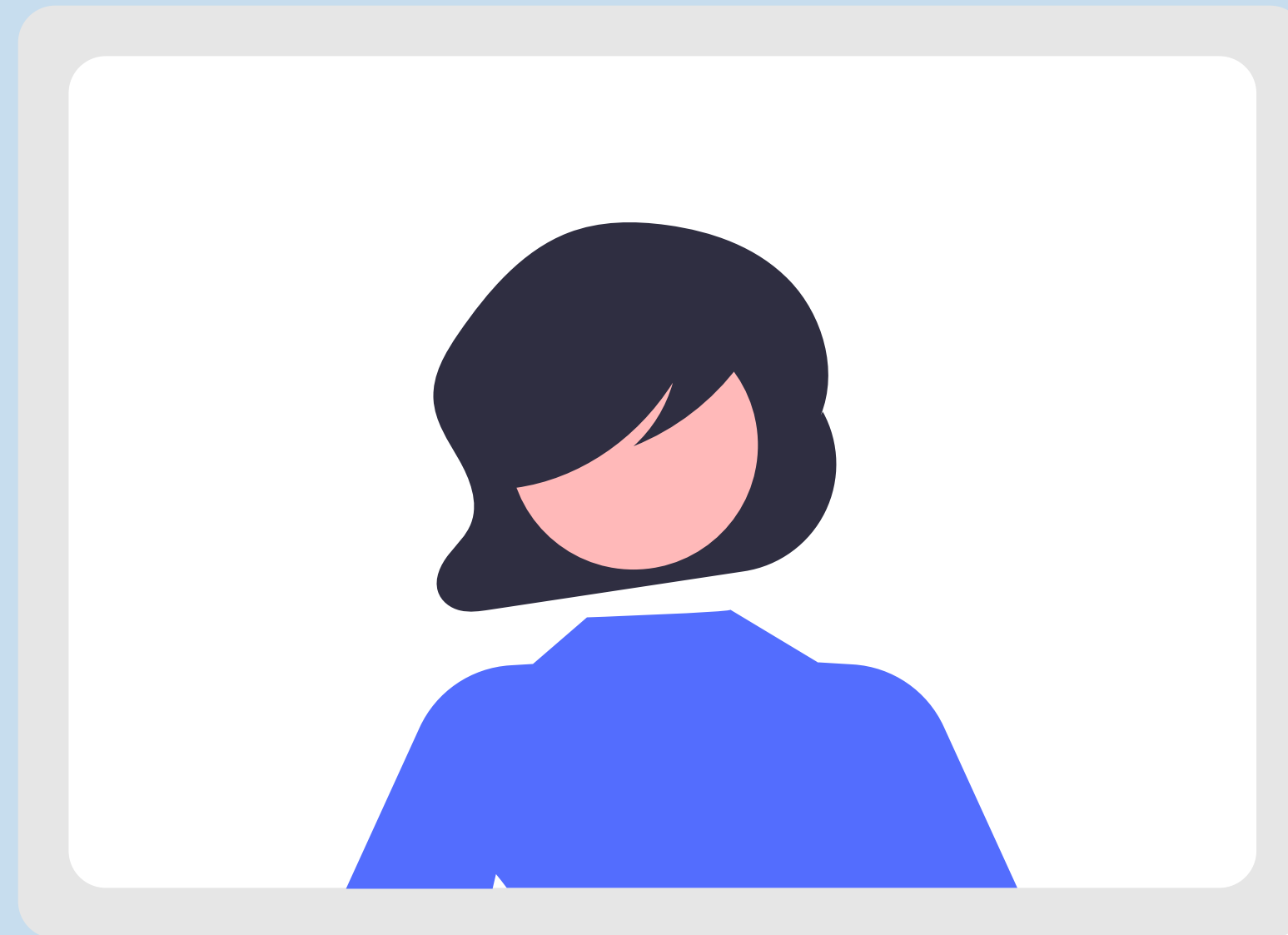
Ensure they feel comfortable with asking questions





## Communication

Ensure meetings are clear in their focus



Adapt communication  
to ensure it is clear  
and concise





Support important  
communications  
in more than one  
format



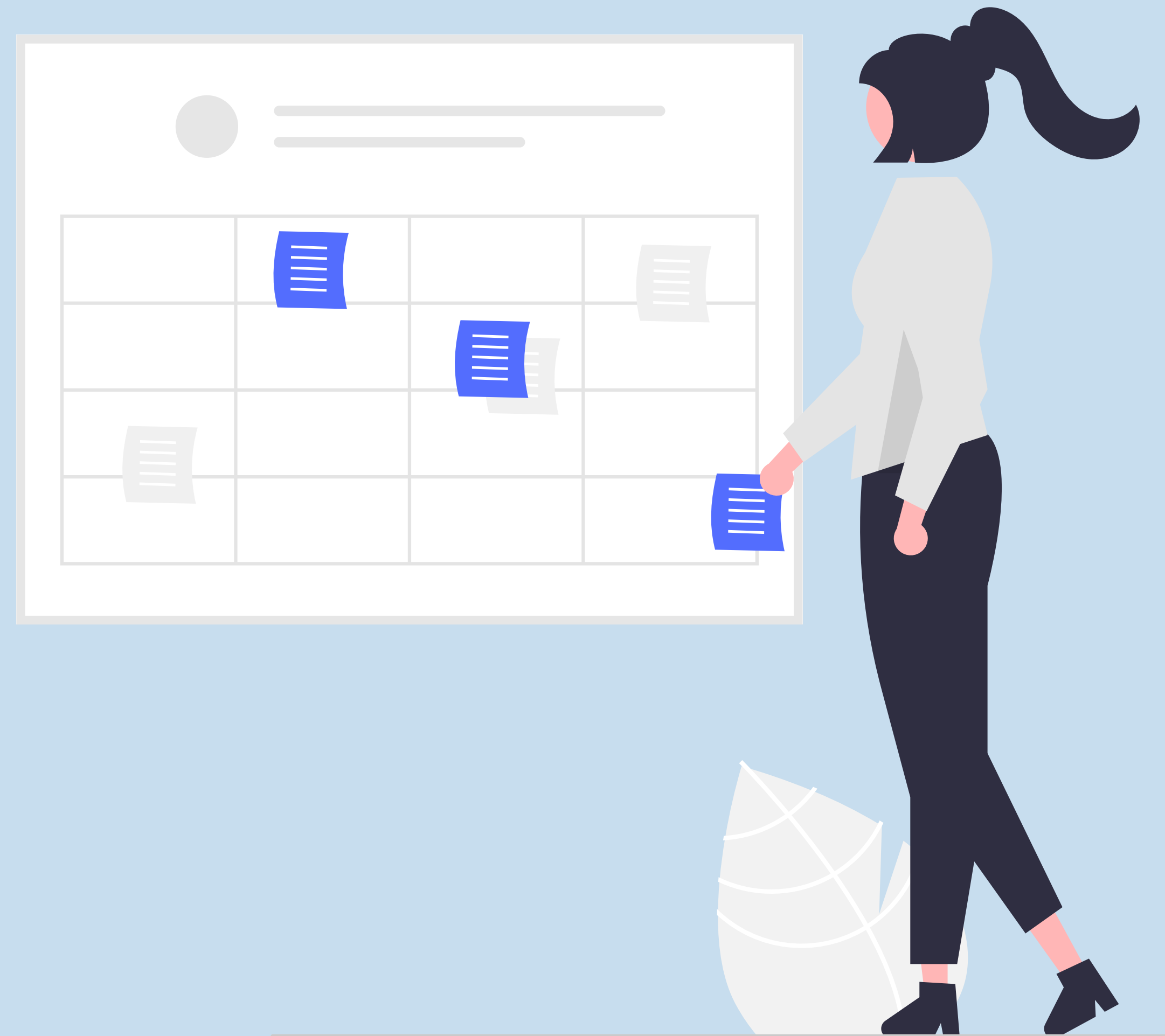
Assume best intent  
in communication





# Time management

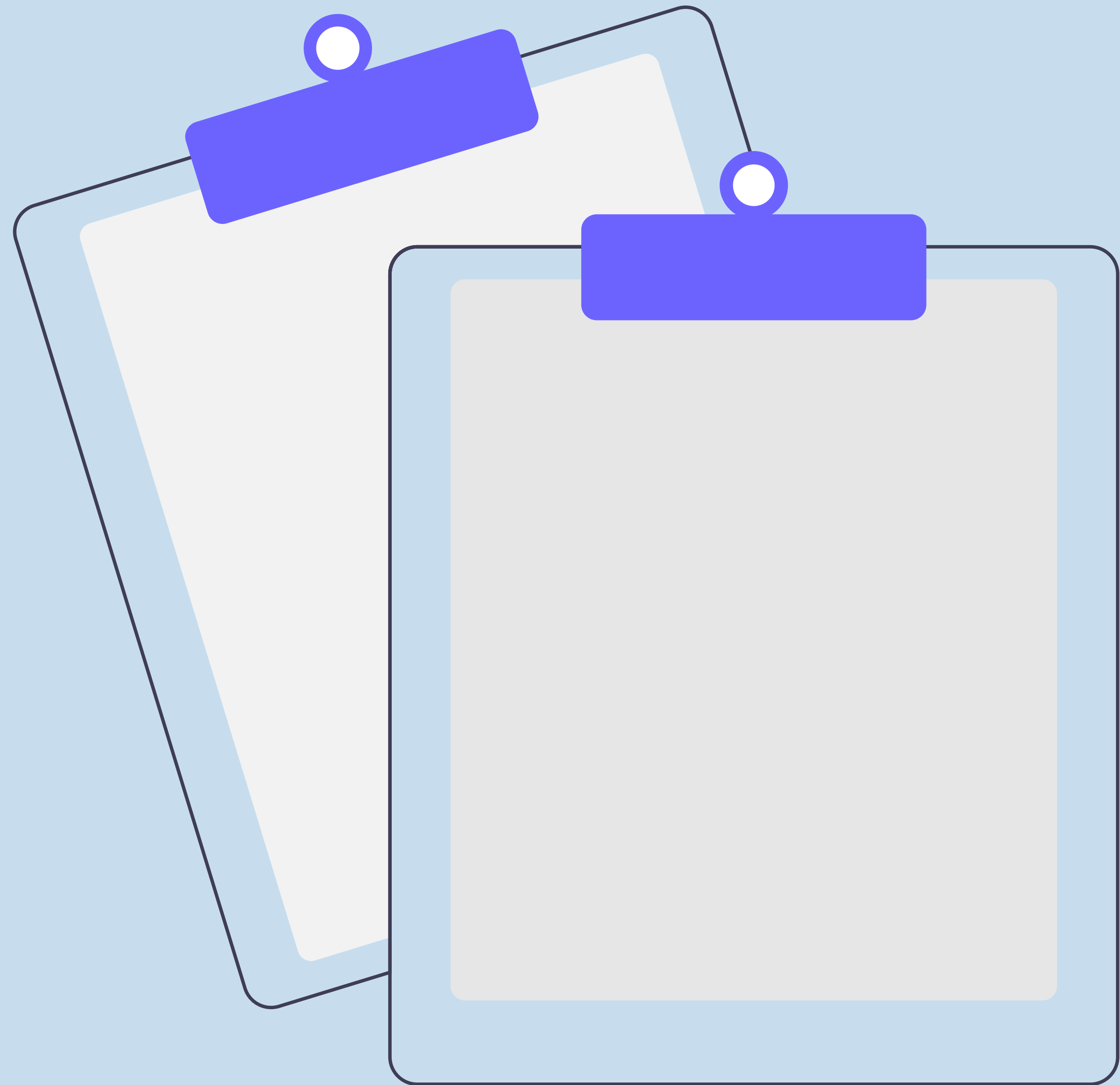
Provide a clear routine  
and work schedule



Give clear and concise instructions for tasks



Support them to  
ambiguity



Set clear deadlines

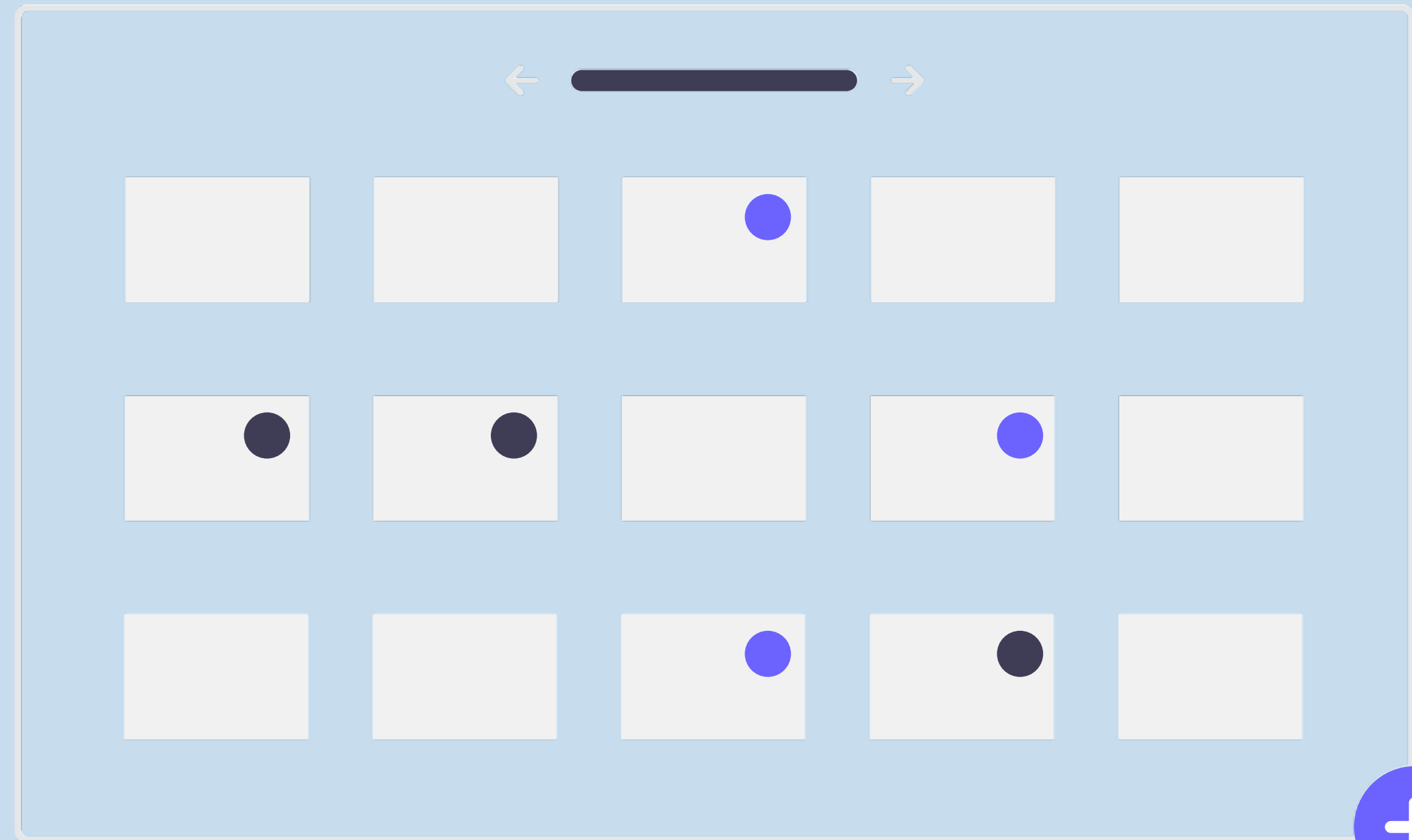




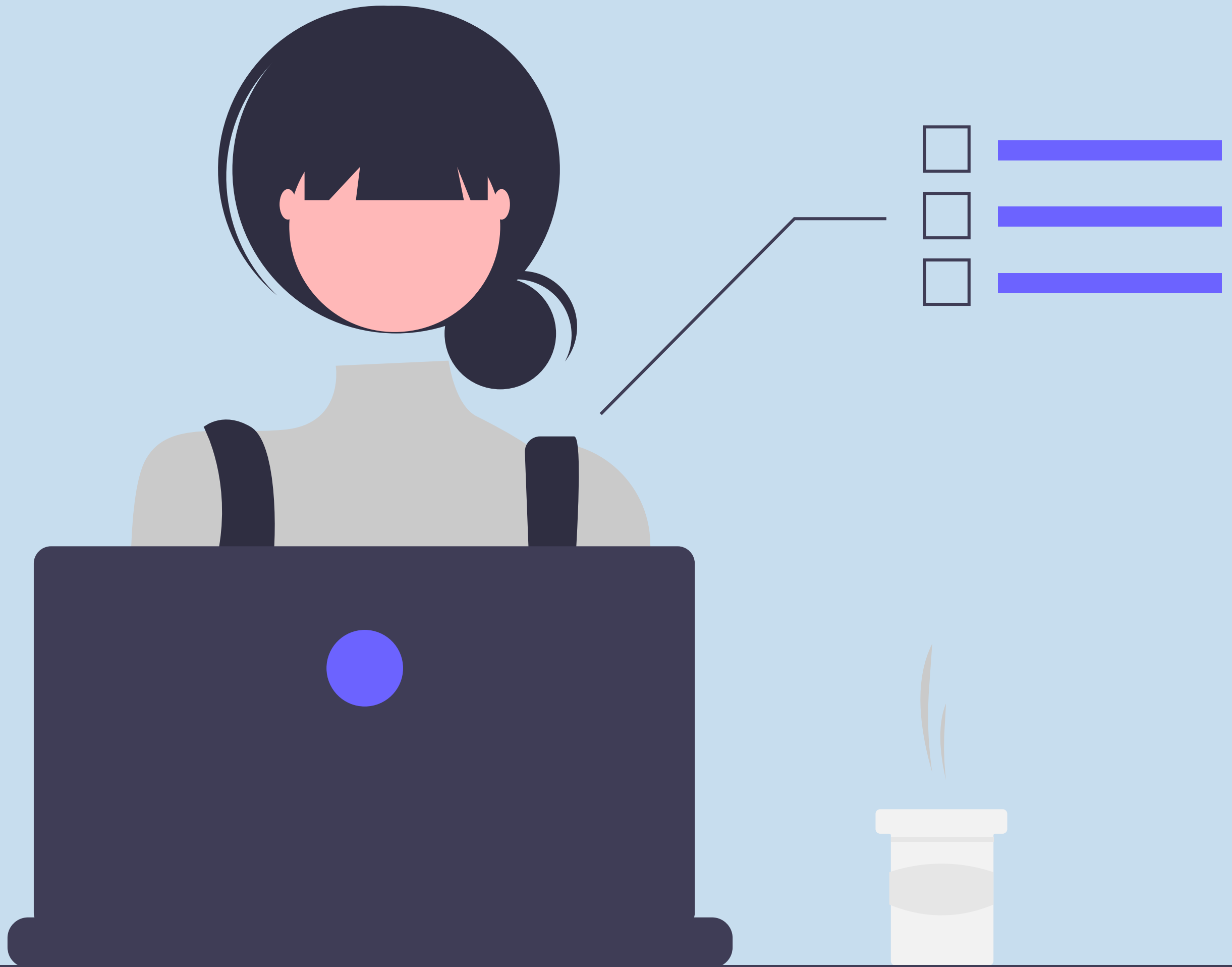
## Attention and focus



Ensure there is  
adequate spacing  
between meetings



Be mindful of their  
focus time





# Sensory Sensitivity

Give people the option  
for a personal desk in  
the office



Help them to  
avoid sensory  
distractions



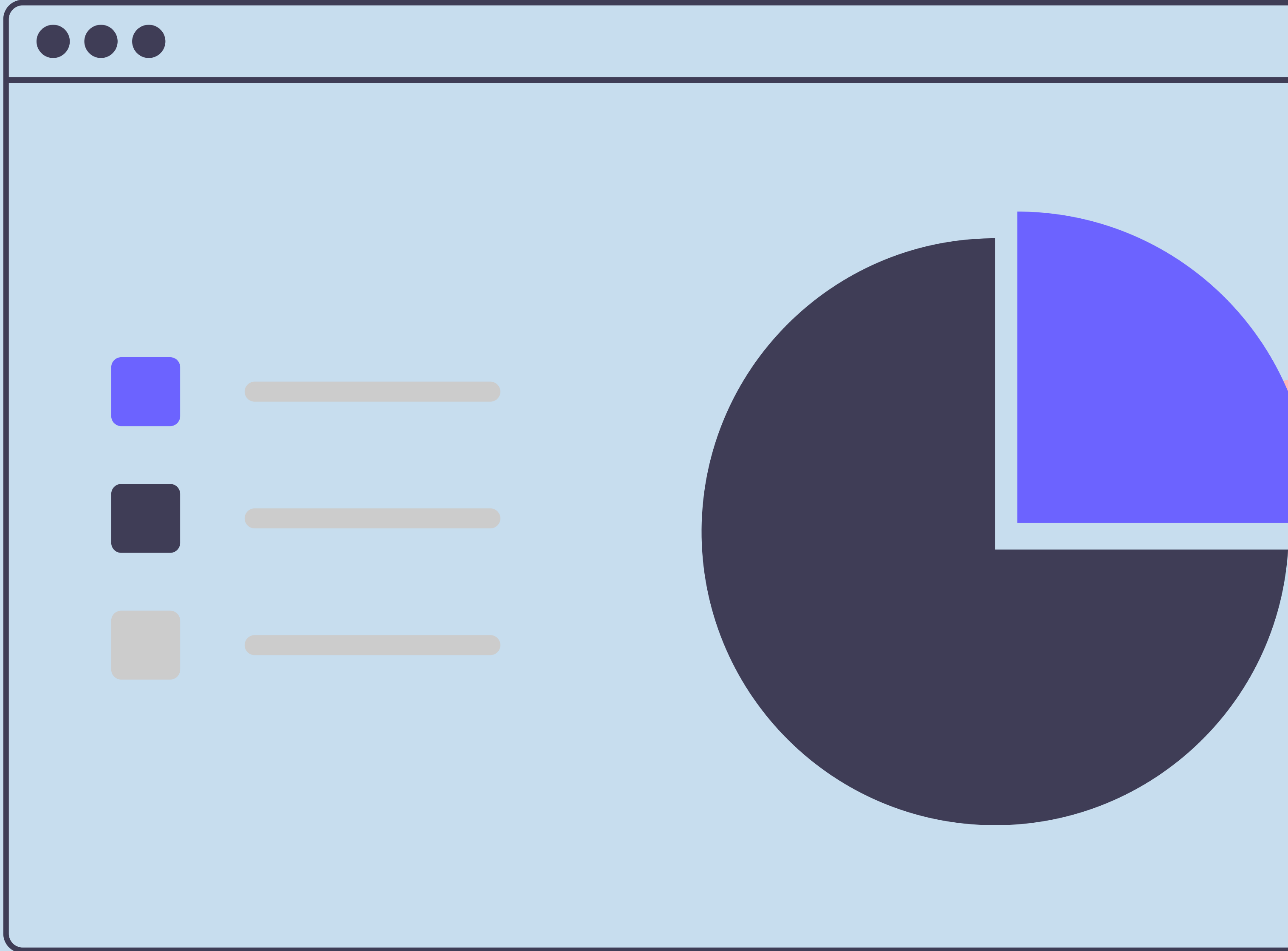


# Information processing

Adapt how we  
carry out training



Adapt how you  
present data





# Adapt how you give feedback





**Wrapping up**

Every neurodivergent individual is different

Adapting how we work will lead to our teams  
working in a more inclusive way

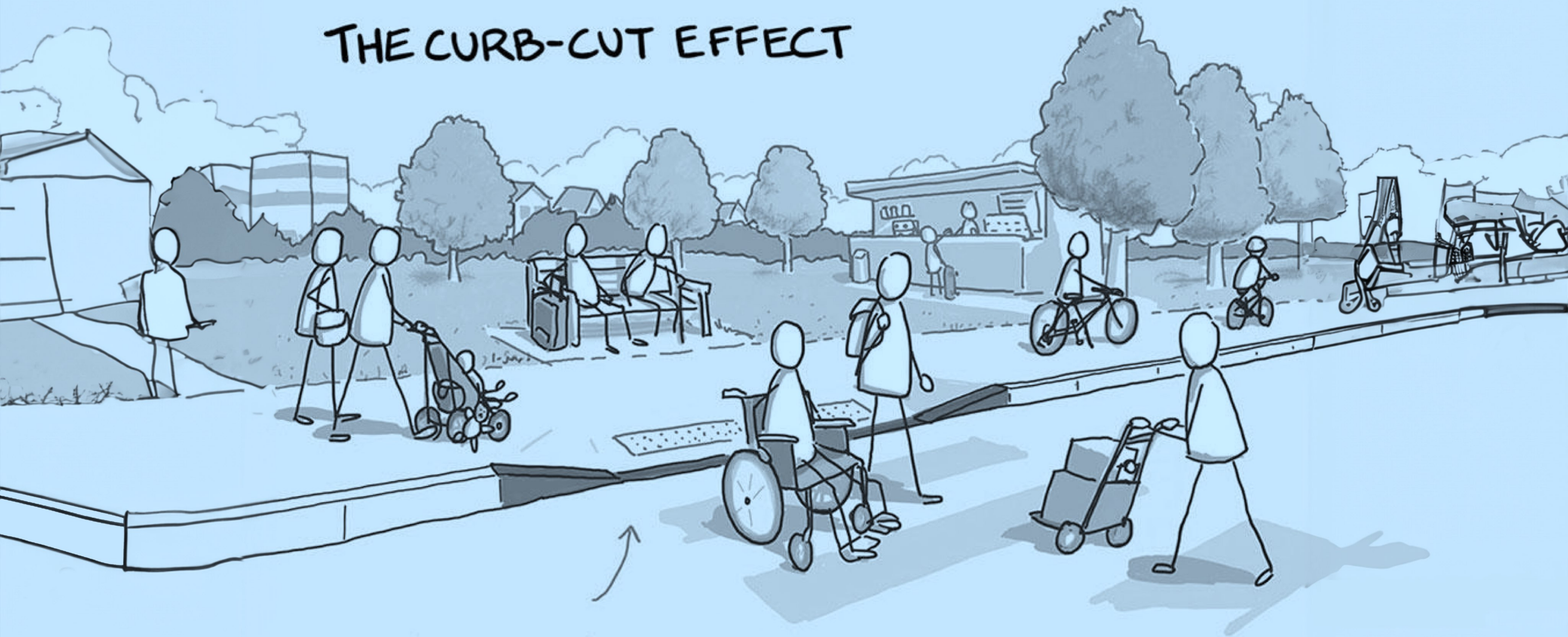
Through having empathy, we can help our colleagues be at their best

Prioritise the needs of the few rather than the convenience of the many



Further resources at: [jonathanfield.ing/leaddev](https://jonathanfield.ing/leaddev)

# THE CURB-CUT EFFECT



WHEN WE DESIGN  
FOR DISABILITIES

... WE MAKE THINGS  
BETTER FOR EVERYONE

sketchplanations