

Accessible Writing and Neurodiversity



Written for Neurodiversity in the childbirth journey Workshop

Hayley Jeffrey
Accessible and Inclusive Design Specialist
Imaginary Umbrella Co
ImaginaryUmbrella@gmail.com
ImaginaryUmbrella.com

Image by Nicole Hammonds from the Noun Project 2021

Hi There,

This document is designed to help you make writing more accessible. Neurodiversity is complex and individual experiences can vary widely. So treat this as a guideline only.

Remember, the best form of accessibility is paying attention. The person in front of you is an expert in their own needs.

"Disability is something that happens when people with impairments face barriers in society. It is something that happens when the world we live in has been designed by people who assume that everyone is the same."

- New Zealand Disabilities Strategy

See the quick accessibility checklist at
the end of this document.

Contents

Universal Design	4
Images	6
Alt Text	7
Example: Low -High contrast	7
Text and Fonts	8
Colour	10
Examples: Color pallets	11
Colourblind checker	12
Use colour to your advantage	12
Links	13
A less helpful link	13
Easy Read	14
Social Stories	15
Form fatigue and anxiety	18
Language	19
Identity	21
Neurodiversity is slightly different	22
Good language to explain neurodiversity	22
Gender identities and family	23
Keep Learning	24
Listen to this document	25
Quick Checklist	26
For more information	27



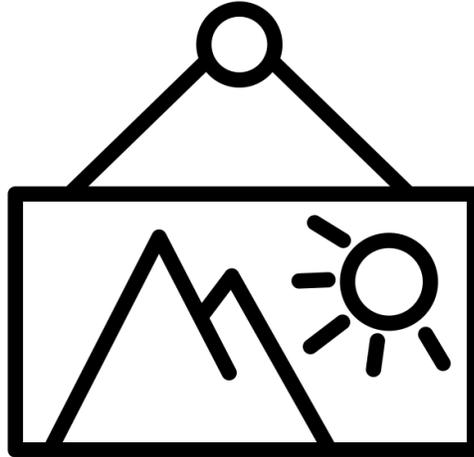
Created by Laura Amaya
from Noun Project

Universal Design

Accessibility helps everyone. You might be surprised how inclusive thinking benefits everyone you interact with, not just people with disabilities.

A great example of accessible design benefiting everyone is the curb cut. A curb cut is the smooth ramp from the sidewalk to the road, now universal to street design. This adaptation was fought for by disability advocates in the 1970s. We could not imagine life without this useful adaptation now.

[Click here for a podcast about the history of curb cuts and disability advocacy](#)



Created by faisalovers
from Noun Project

Images

- High contrast
- 200% + without pixelation
- Use Alt Text
- Avoid superimposing text over images

Good images act as signposts within the text, helping with wayfinding and comprehension.

If an image is too ambiguous, it is likely to sideline an autistic reader, decreasing readability. People on the ASD spectrum spend much longer looking at images in a document compared to the average person. For these readers, images help interpret the 'gist' of the text.

Likewise, colourful clip art can be bewildering; choose simple icons with no more than one or two shades of colour or uncluttered photographs.

Alt Text

Alt text is a written description of an image that can be spoken by screen reader software. The images in this document all use alt text descriptions.

For help with great accessible icons, check out The Noun Library. The Noun Library has 3 million open-source icons available for download. The Alt-Text function can be found under, Format/Image drop-down menu.

Lastly, make sure your image is of high contrast and able to be enlarged 200% without losing detail. This is crucial for those with sight impairments to view your document with screen magnification.

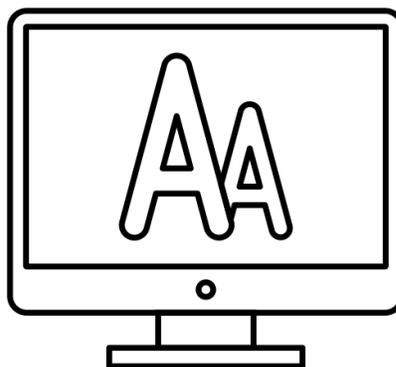
[Click here to explore The Noun Project](#)

[Research paper: Accessible Texts for Autism: An Eye-Tracking Study](#)

Example: Low -High contrast

Low Contrast

High Contrast



Created by IYIKON
from Noun Project

Text and Fonts

- Helvetica, Courier, Verdana
- 12 point font
- Line spacing 1.15
- Avoid bold and italic
- Short paragraphs
- Align left, avoid justified formatting

People with specific reading disabilities benefit from clean, distinctive letter shapes. Helvetica, Courier and Verdana are all good choices.

Bold and italicised words decrease reading speed and comprehension.

Making sure documents aren't cramped. Negative space on a page is important for processing information successfully.

Consistent even spacing is also important. Justified formatting makes for inconsistent tracking between words and is best avoided.

There are several open-source fonts designed for people with dyslexia. Easy Read™ is one font that has scientific backing for increased readability.

[Easy Reading Font website](#)

Font impact on dyslexia

Below are some examples of how font choice can affect the reader.

preferences regarding all readers, dyslexics in particular, centred can be used for headings or titles. Aligned right and justified causes problems, aligned right causes confusion with flowing to the next line. Justified text creates non-consistency of word spacing, and this can lead to the river-effect distortion. Very important is the strong advice against hyphenation, the word is split and there fore causes difficulty in comprehension. As an overall remark I'd like to emphasise not to provide a 'learn-how-to-read' visual, but to focus on clarity, consistency and space, used in its

Read Regular is created without copying or mirroring shapes. Therefore the frequency of repeated shapes in a text is decreased. This results in a minimum chance of visual distortions (swirl-effect). The aim is to create interesting typography that will maintain the readers' interest and will prevent them from getting bored or frustrated. Diversity in text knows many variations. We must understand the fact that typography for a novel is different from a magazine or a publication for education. Even so a novel has the potential to be clear and interesting. This can be achieved in any level of creativity, thinking on type size, leading, the amount of words on a sentence and the character/paper combination.

of design, font, type size, contrast and layout, are the focus. The colour of a font, such as light, regular, medium and bold create a certain contrast with the background. The challenge is to find the right contrast (character colour and paper colour) that complements the characters. This can be accomplished with the right weight of a typeface in combination with the right colour paper, avoiding the washout-effect.



Created by Vector Portal
from Noun Project

Colour

- High contrast
- Muted, low-intensity shades
- 2-3 shades only
- Use a colour blind checker
- Avoid bright yellow

A neurodivergent person can be particularly sensitive to colour and light. People with high sensitivity to stimuli prefer muted and pastel hues. Leave your background white or a subtle grey.

Bright yellow, in particular, can be difficult to process for those on the ASD spectrum.

Have you noticed the text in this document is dark blue? Reducing the intensity of text colour makes it more restful to the eye and the brain of someone who is sensitive to sensory inputs.

I have added below some examples of bad and then good colour schemes, apologies to your eyes in advance.

Examples: Color Schemes



Colourblind checker

Use this tool to show you what your colour scheme will look like for people with colourblindness.

[Adobe Colour-blind checker](#)

Use colour to your advantage

Colour, shape and position can add context clues and help neurodivergent people connect with information.

Just make sure to keep things clean and simple.

[Designing for neurodivergence - Blog by Full Fabric](#)

[Atypical Color Preference in Children with Autism Spectrum Disorder](#)



Created by Icon Lauk
from Noun Project

Links

- Descriptive links
- Make sure to add a title

Make sure to use the insert link function. Long-form links are read out loud by those using text to speech technology and can take away from the comprehension of your writing.

Secondly, "Click here for more information" is not specific enough to explain where the link will take you. Clear instructions decrease user anxiety and increase chances of successful navigation

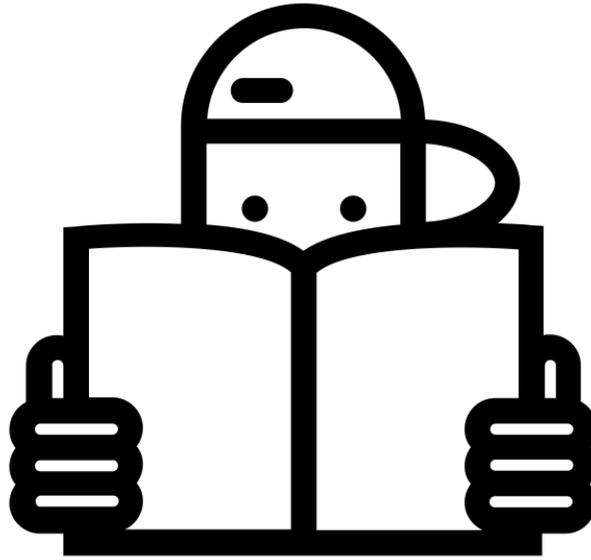
A good link

[Click to read about happy cats here](#)

A less helpful link

Click below for more information

<https://www.rd.com/list/happy-cat-signs/>



Created by Eugene Dobrik
from Noun Project

Easy Read

- Short words
- One idea per sentence
- Resist long-winded flowery descriptive passages with a million words

Key information should be in the first sentence. Simple writing can take a while to get right. Keep in mind your reader's dignity. Clear information does not need to sound childish.

Easy Read is especially helpful for adults with low literacy.

Low literacy is a very real issue for some adults with neurodiversity or physical impairments such as deafness.

Many intelligent and capable people who experience disabilities will find simple wording helpful to navigate important information.

This document, for example, includes short bullet points under each heading indicating the key points and then more information below.

Social Stories

A social story is an easy read document with pictures explaining a timeline of a procedure or process. Social stories are useful for conveying complex processes simply and decreasing anxiety.

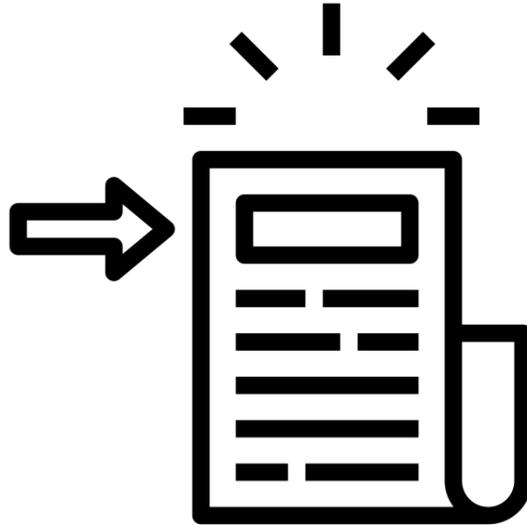
Many people don't have a mental picture of a maternity ward, operating theatre or recovery room. Seeing photographs of these spaces beforehand could significantly decrease pre-birth anxiety.

People on the ASD spectrum and with ADHD can feel overwhelmed and disorientated with new environments, strong stimuli or rapid decision making. Social stories can help decrease the amount of new information involved in a hospital birth environment and free up bandwidth to engage better with the process.

Currently, most social stories are designed for children. But an appropriately pitched social story for adults could be helpful to many types of people giving birth.

[Click here to see an example of easy read text](#)

[Click Here to see an example of a social story](#)



Created by Nithinan Tatah
from Noun Project

Headings

- Use pre-formatted headings and titles
- Nest them correctly
- Add a heading to charts, pictures and diagrams

Use the inbuilt formatting function of google docs or MS Word to create titles and headings.

Text to speech software can identify headings and indicate them to the listener.

Bold or italic headings are not recognised in the same way and can decrease comprehension.

Consistent nested headings act as a wayfinding tool for those with shorter attention spans and those who struggle with information overload.

Pretend title - Cats

Heading 1 - Cats in History

Heading 2 - Babylonian cats

Subtitle - Gardens of cats

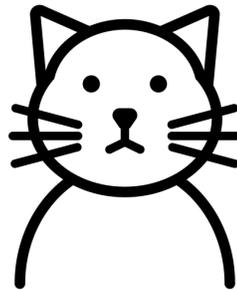
Normal text - How cats invented gardens and other words.

Heading 2 - Cats of Persia

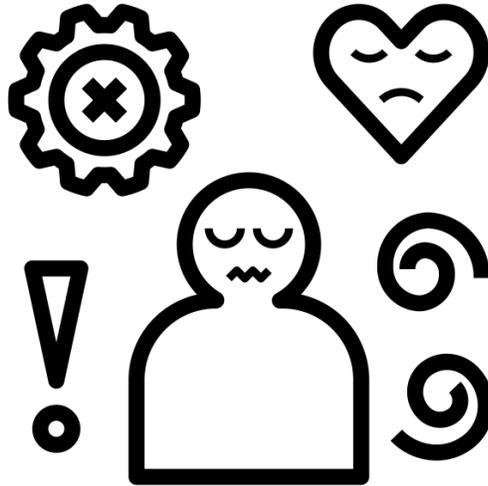
Subtitle: - Can they speak Persian?

Normal text - The answer is yes, all Persian cats speak Farsi if there is food involved. More words.

Heading 6 - Descriptive Image Heading. A drawing of the world's best cat



Created by Llisole
from Noun Project



Created by Nithinan Tatah
from Noun Project

Form fatigue and anxiety

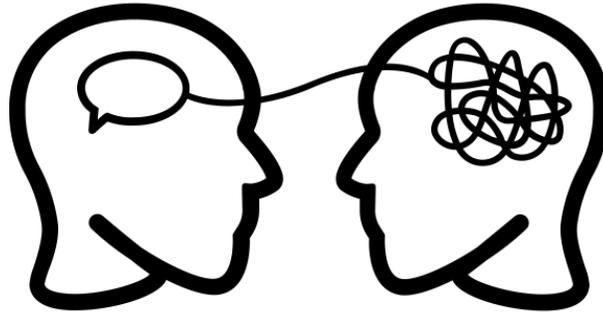
- What is essential
- Limit follow up information

Form filling can be very anxious making and trigger avoidance techniques.

The best thing you can do for people with ADHD and SLD is to make forms short and achievable.

Support people to fill forms with you rather than expect it to be completed and returned.

Limit requirements for supporting documentation where possible. Provide a short checklist of things to do: the fewer steps, the better.



Created by Prashanth Rapolu
from Noun Project

Language

- Avoid idioms and metaphor
- Avoid inference
- Avoid assumptions of "Common knowledge"

In accessible documents, a literal word choice is best.

Some people on the ASD spectrum find social scripts and inference in a text lead to misunderstandings. The gist of the text might be missed entirely if it relies too heavily on inference or social cues.

For example:

"I just need to put out this fire at the office, I will be there in 3 seconds"

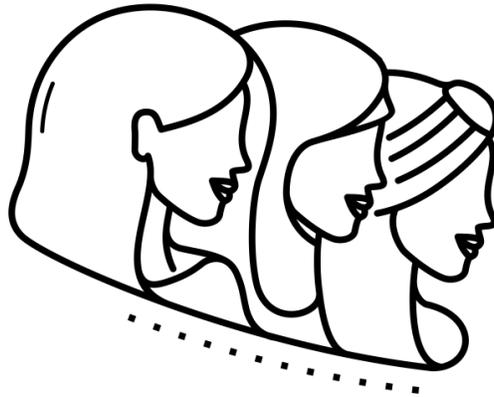
"I just want to squeeze that baby till she pops"

While both sentences are meant to reassure, when taken literally, these can seem quite alarming.

Most ASD people navigate this (irritating, illogical) aspect of the world successfully all the time. However, this can be tiring and requires concentration.

Birth and pregnancy can be a time where particular care around communication will support calm and empowering experiences.

[Research paper: Keys to improving reading for people with autism](#)



Created by Olena Panasovska
from Noun Project

Identity

- Keep up with the evolution of labels and identities
- Be aware of your cultural assumptions
- Consider gender identity

A rule of thumb is person first, disability second.

We want to reinforce that the identity of a person isn't defined by dysfunction.

Avoid

A disabled person

That blind girl, you know the one

Disabled people, all the disabled people

Instead, use

A person who experiences disability

A person who is blind/ experiences a sight impairment

A person who is deaf

A person who experiences learning difficulties

A person with accessibility needs

This is Hayley. She is fabulous and loves cats

Neurodiversity is slightly different

The medical community tends to associate cognitive differences with impairment and dysfunction. Generalising neurodiversity as a "wrong way of thinking" is problematic. While neurodiversity has a very wide spectrum of experiences, many neurodiverse people prefer to be understood as naturally divergent rather than "deficient" humans.

When referring to a community or individual who experiences different cognition or disability, focus on accessibility instead of disability; on structures that can be reshaped towards inclusion and access for users. Conversations framed this way avoid the traps of over generalising, ghettoisation and discursive victimising.

Good language to explain neurodiversity

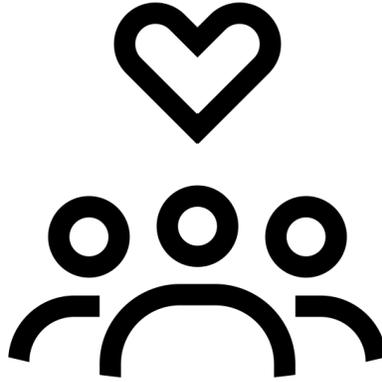
Someone on the ASD spectrum

A neurodiverse person

Someone who lives with ADHD

I am Hayley she/her, I experience extreme enthusiasm and executive functioning disagreements with ambiguous deadlines.

[Research Paper: Autism as a Natural Human Variation: Reflections on the Neurodiversity Movement](#)



Created by Oksana Latysheva
from Noun Project

Gender identities and family

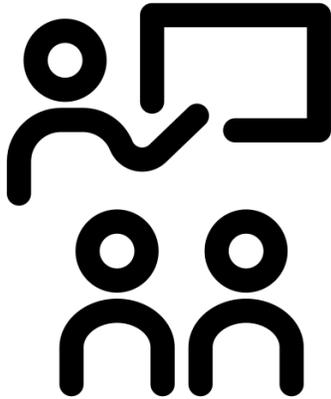
Please consider pronouns and the identities of different families as you write. Thoughtful design and writing can avoid exclusion, making your practice a place where everyone feels safe and welcome.

Instead of

- "As mother and baby bond"
- "All women are welcome"
- "Great to see you and your partner"
- "Is your husband here with you?"
- "Ladies and gentlemen"

Consider trying

- "As your new family bonds" / "As you bond with your baby"
- "All expecting parents are welcome"
- "Great to meet the whole team"
- "Are there any other people you'd like me to meet?"/"How many are we today?" "Hi, can you introduce me?"
- "Hi Folks, welcome everyone"



Created by Jean-Philippe Cabaroc
from Noun Project

Keep Learning

As more people who experience disability step into the conversation, these recommendations could become outdated. Check in regularly and ask questions often.

But most of all, don't panic. Accessibility is about better relationships with real people. Relationships with warmth and curiosity will always have the best results no matter where you are and who you engage with. But Thinking about these things in advance and designing around them will always help encourage good communication and good experiences for the people you work with.



Created by Yoyon Pujiyono
from Noun Project

Listen to this document

Experience accessible technology for yourself, listen to this document with a screen reader. You can do this in a few ways:

Microsoft Word: Select the passage to be read and click Read Aloud under the Review tab.

Google Docs: install the Natural reader, NVDA or ChromeVoX extensions.

[Link to Natural Reader, text to speech reader](#)

[Link to NVDA Screen Reader](#)

Quick Checklist

Font

- Size: 12 points or more
- Color: no red and green
- Style: Helvetica

Formating

- Short paragraphs
- Space between paragraphs
- 1.15 line spacing
- Use indentations

Images

- Relevant, unambiguous
- Can be enlarged 200%
- High contrast
- Alt text

Links

- Descriptive link text
- No raw links

Easy read

- Short
- 10 or less words
- Avoid “ing”, “ly”, “ism” endings
- One idea one sentence
- Avoid double meanings like “flowery” or “cat call”

Headings

- Use the pre formatted headings



For more information

Hayley Jeffrey is an accessibility consultant working in Wellington, New Zealand.

For more detailed information and conversations on inclusion, please do get in touch.

Hayley Jeffrey She/Her
ImaginaryUmbrella@gmail.com
www.ImaginaryUmbrella.com
0279759991