NEW SPEAKER: ANNIE: Hello, everyone, welcome to

today's webinar, it's just gone 1 o'clock so I'm just going to give everyone a chance

to join.

 There are lots of people registered for today as it's a very popular topic.

 If you joined online, do feel free to drop into the Q&A box and say hi to the panellists and any other attendees.

 We have disabled the chat feature as we have discovered it can cause problems

for some people using the screen readers.

 So just to see the participant numbers going up, glad you could make it today.

 I'll give it a minute or so for a few more people to join.

 OK, I can see we have a few more people joining now so we'll officially start the webinar.

 So, hello, and welcome to how technology can help people with dyslexia.

 My name is any, commune cases manager at AbilityNet.

 I'll run you through what you can expect from the session.

 Next slide, please, Dafydd.

 So just to go through a few bits of housekeeping.

 We have got live captions on the webinar provided by Joanne at MyClearText so thank you Joanne, you

can turn them on using the closed caption option on the control panel.

 There are also additional live captions via Streamtext.

NET and slides are available at slide share.

NET/AbilityNet and on the website at AbilityNet.

org.

uk splsh dyslexia/webinar.

 If you need to leave eearly, don't worry you can receive an e-mail with the recording transcript and slides

and depending on how you joined, you will be table to find the Q&A window.

 If you want to ask Dafydd any questions, drop those into the Q&A area and we'll address

them after the session in a follow-up blog on the website.

 Then finally we also have a feedback page that you will be directed to at the end, which invites

you to tell us about any future topics you would like to cover in our webinars so.

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 Handing over to Dafydd now.

 DAFYDD: Awesome, thanks a lot.

 Hi everyone, I'm Dafydd, Welsh for David, I'm one of the senior accessibility consultants

over at AbilityNet.

 I can see some strange things happen on the slide with our logo.

 Ignore that please for now.

 What my role can be surmised as is I complain about websites a lot.

 I will be documenting whether I think websites are accessible against stuff like the web

content accessibility guidelines which can be surmised by me saying your code is

bad, but I'm a lot nicer that than that, I promise.

 I refer to myself as dyslexic for the ease of terminology.

 Now, before I get properly stuck in to what I'm going to be talking about, I want

to offer a disclaimer.

 So what I'm going to talk about are personal and idiot incratic experiences.

 This is what dyslexia is for me, just me and I will council sell people not to base that output on

anecdotal information from a single data point.

 Now, for audio descriptions, there are two paintings of cats on the slide and

they look to be cats that have been painted by someone, but they've probably

never seen a cat in person but has potentially been told about what a cat looks like and painted it again base

on the that anecdotal information.

 So by all means take some of the stuff you are going to be experiencing today to get a sense

of some of the things that you can be thinking about with dyslexia but do not necessarily think that this is the

kind of be all or end all for dyslexia because I'm very keen to not come across that

way.

 Now, I also want to identify at least for myself what dyslexia isn't.

 So, there is an article on the CNN website that is simply titled This Is What Reading Is

like If You Have Dyslexia and it documents nothing like what reading with dyslexia is like for me.

 So, when the very first kind of housekeeping I would like to do is to stress that you might

have come across some things that talk about dyslexia and the experience will have

to, and it's not necessarily one-to-one.

 So, the CNN article has a plug-in where it moves words around so it flips word

up and down, substitutes individual characters within a word and it really just

looks like someone tripping on acid.

 If you stare at the text long enough, you go, there is something weird going on

here!

 Again, it's not what dyslexia is for me, might be what it's like for other people, but not in my experience.

 What I will say is if you have come across things like this, like this CNN

article or extensions that start to mess around with the word on the page, what you

can think about them as doing is instead of communicating what the literal

experience of dyslexia is, vis-a-vis when I as someone with dyslexia read a page, I literally see the word jumping

 about, I don't see that, but is instead emulating an experience of

dyslexia in as much as it's trying to put a spanner in the works of your ability to

process text.

 So it's not kind of literally what someone like myself is experiencing, but potentially is trying to emulate

the kind of overall effect on yourself.

 So again that is a little bit of a disclaimer to make sure that we are on the same page.

 Now, I've talked about what dyslexia isn't, so we'll talk about now about what it is.

 So it's really, really broad.

 One of the small, I won't say criticisms, but one of the challenges you can get when talking about

dyslexia is that it's a wide umbrella that a lot of people have very unique experiences

of and, in many cases, it's an overlap with other things so.

 For example, some of the things that I'll be talking about in my experience with dyslexia, it

might in the part be impacted by my autism for example.

 So there often aren't these harsh lines with dyslexia where this is the very neat, very crystal clear

diagnostic mechanism of it.

 But in my experience, it affects things like my reading and spelling and the way in

which it does is having difficulty with phone logical awareness.

 What I mean by that is that other people seem to have more of an innate understanding of the link

between sounds and grammar structures and kind of the way in which we say things and the way it builds words together.

link between sounds and grammar structures and kind of the way in which we say things and the way it

 phonological awareness. What I mean by that is that other people seem to have more of an innate understanding of the builds words together.

 I struggle with that.

 When children are very young, they echo stuff back, so you say something to a child, and

they don't say the words back to you, but they say the same sound structure so you might say something to a child

along the lines of, "would you like an apple?

" And the child might repeat something back like ga-ga he of ga hitting the same

sounds and I wouldn't do that because I wasn't clicking with those kinds of ideas that language was informed by

the sound structures.

 Verbal memory.

 So, when we speak and when we type, we are kind of spinning multiple plates on our

head, so there's the word that maybe we have just written, the word that we are in the process of writing, and the

word that we are about to write.

 So if you think of writing down a sentence or graph, you can think of it as you are kind of

doing three things - looking back, at the present and the future.

 - I struckle with that, I struggle to keep in my head multiple things at once.

 I can remember one thing, which is fine but short-term memory, I can struggle.

 So I can be typing something and I can forget the last thing that I just read so I've

got to go back and double check or I can forget what I was about to write a so

I get stuck in the middle like on a desert island of a word and struggle to get

either side again because of this kind of verbal memory.

 As well as processing speed.

 Processing speed you can just think of as the quickness that the brain just processes textual

information so the speed at which you just, it goes to your eye balls, do goes to your brain

and your brain goes, it's that word.

 For me, I get stuck in second gear where, for whatever reason, and we'll talk about

particular bumps in the road like we'll talk about particular pinpoints, there are

just some things that make me stall or make me, you know, driving along in an example, real quick with my language

and something will just shock me, come to a jolt and I'm stuck back in second

gear.

 Now, there is some kind of co-occurring difficulties and this is where the

umbrella gets broader but where we are talking about things like moto-coordination,

so the less of a problem is typing and spelling but more literally the act of spelling on a keyboard where I have

less hand-eye coordination of things.

 For example with spelling, when writing something on a piece of paper, it's, no-one is

ever going to understand my hand writing and that is fine.

 Things like mental calculation, so in the same way again, verbal memory where mental math has

the same model of OK I'm going to hold multiple things in my head at one point in

time, the word I've just written, the word I'm going to write and will wri in the future, same things with maths

although that overlaps as discalcula.

 Short-term memory and concentration then.

 The ability to focus on one thing at one point in time and keep on it, because

the challenge, as I mentioned, if you think about any kind of textual process,

verbal process where you are writing something, speaking, you're spinning a few plates at once.

 For some people you can think, OK, well I can generally handle five or six plates, seven plates.

 I struggle, I can handle everything well but fewer concurrent plates.

 So fewer plates spinning at once.

 Focusing on my task of documentation.

 That is perfectly fine.

 If someone comes up to me and says, can I add one more, the thing falls

down.

 This is stuff that I'm pulling from the British Dyslexia Association, it does

along with my experiences where they talk about identifying teaching children,

young people dyslexia with literal difficulties in as much as it's not just sending kids home to practice

their spelling more or for example getting them to write lines 100 times, it's a bit more

nuanced than that.

 That is why I'm pulling stuff through from the Association to give you a flavour of the broad themes.

 Now, I've already touched on the this a lit, but to drill down again with what

it means for me, a lot of it just feels like my brain is struggle with information that my eyes have.

 It happens with input-output and it's a neurological processing challenge and short-term

memory span.

 So if I'm again trying to juggle multiple things, the big manifest material experiences of dyslexia for

me is this neurowill have linguistic process and challenge where if I'm

trying to spin too many plates, I am struggling and I have to think about this.

 So it's not word blindness, it's not like that CNN article where I see words dancing, it's

more on the lines of I'm struggling to spin loads of plates at once and there are pinpoints that make some of those

plates be a bit more fragile or start to wobble more than you might expect.

 Now, in terms of what dyslexia is, we have got a sense of broadly what it is,

what it isn't and what my more individual experiences are.

 We are now going to talk about what are some of the techniques or ways of adapting that I'd

experienced.

 So, this can be applied broadly, first and foremost in an exam.

 You get 25% extra time.

 That can be in the workplace, as an employee, you are given a task, 25% extra time to complete that task.

 It might be on a website, you know, for example, you are developing some kind of

website where you have got some kind of log-in process and you end up saying, by the way, this user journey is

limited to this much time oh unless you tick a box unless we have evidence you have

got dyslexia then we'll give you a bit of extra time.

 That's not great.

 The challenge is that you are individually responsible for self-correction so great extra

time, great I get to spend 25% extra time doing something that probably isn't fun, both materially anything

that has a time limit, an exam, a task at worse, a process on a website like applying

for a loan, it probably isn't going to be the funnest thing in the world, and so you

are probably not going to want to spend extra time self-monitoring because it makes you feel bad.

 You have to spend more time doing it and less time in your life doing other stuff.

 There are also some challenges with others thinking that you are lessening their

achievement, so in the workplace for example, if everyone else is getting 100% time and

you are the one getting 125% extra time, well those others don't feel great about

that and you don't either because you potentially get impostor syndrome of am I only here because I got that

extra time?

 You know, did I only get through that, let's say again it's a website and

maybe a test on a website saying, in order to get XY and Z, you need to get through

this process, you maybe feel like you only got it because they gave you extra time.

 So it can feel a bit strange.

 Now, the Big Ben fit is technology.

 I talk about the idea of one challenge for me, is getting stuff from my head on to

paper, digital or literal.

 You are probably all familiar with kind of auto-correct.

 Now, I use a tool called global auto correct that you can think of being

your system level auto correct but on steroids, beefier with more intelligence.

 There's other things like auto-complete, grammarly, but the idea being that there are

ways where the system can just automatically detect errors.

 Now, if I zoom over to my notes, you will see some of this stuff disabled on a system level.

 I had a system level, please don't correct my stuff.

 I have this set up because it allows for my extra level tool to be doing more of the heavy lifting so it

doesn't come into conflict with some of the system level stuff.

 Now, you might come across some things that you might have experienced yourself so.

 If I type out the sentence, "we've gone", you will notice it added the aapostrophe.

 The system picks that up and goes "I'll tweak that for you because I'm almost certain you

don't mean that".

 There's also going to be challenges when someone with dyslexia has specific ways of spelling specific

words, that is just the way that our brain thinks the word is spelt no matter how

many times we look at it.

 One would be phonetic spelling.

 Different, well different is spelt DIF-RENT because that's how you spell it.

 That is the phone et tick spelling.

 This isn't something necessarily that a standard auto-correct could pick up.

 Another one might be something like physics.

 Starts with an F, right, FIZ-ICS.

 Now, this is what a more kind of beefier auto-correct is doings where it is jumping in and saying, look,

we've been monitoring the way this which you try and spell words, we have done research

into things like phone et tick spellings of things, we are going to pick up some

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 Zblb you can sometimes feel like there is too much auto correct and you would

think, I wish it wouldn't tell me I'm wrong all the time, but it helps because it corrects, but sometimes it

lights up all red and you are like, oh gosh, look at all that, it sometimes feels

OTT.

 The niche that fills that is speech-to-text.

 So, what I will use when I am trying to complete words and I'm finding that global auto-correct is

correcting almost everything I do, it might be a bad day, a discipline that's quite technical, or involves

quite a lot of nuanced language, I use spech, I'll just dictate to my machine and ask it

to do the spelling for me.

 So, if I jump back over to my notes, and I'm using Mac-OS so I'm using the in-built

software and I'm going to think of an example sentence.

software and I'm going to think of an example sentence.

 So, if I jump back over to my notes, and I'm using Mac-OS so I'm using the in-built ech, I'll just dictate to my machine and ask it to do the spelling for me.

 This is the example sentence that I am going to say for this webinar full stop.

 And then I'm pressing the key to disable it.

 This is useful, it's not 100% accurate but it's pretty damn accurate and it's really good just as a way

of going, look, I'm having a bad day, this topic is complicated, how can I get through some of the stuff because

 auto-correct is hitting me hard today, it's just saying you know what, I'm

going to jump in and say some stuff.

 Another one of the puzzle is also as I mentioned, it's an input and output

issue.

 So I might struggle to compose language but I'm also going to struggle to

understand it, to read it back.

 So one thing that I experienced quite a lot is redundant use of coordinating conjunctions, so

things like, "we went to the park " ANDY:" Or "Which?

" Or "but but" ands the something that I will not notice.

 Home anymores, things spelt differently but sound the same -- momonym.

 My -- homonyms.

 It will not tell me there is a spelling mistake there.

 But it might help and say, read this out to me.

 This is a bit loud.

 This is the example sentence that I am going to say for this webinar.

 Now, this user software that's very, very similar to screen reading software,

it's using STT, speech-to-text and that allows me to double check this or it's me

saying I visually can't see what is there and I can get it to read the text back to

me and such that it pulls no punches so it will say, " ANDY: And" to me three times because

I've written it out three times but I cannot process it.

 The speech pulse no punches and will say it to me.

 I can hear it, I just can't sea see it.

 There is a bunch of these on Windows, Microsoft office products, like office speak and

outlook now I think have some stuff built in.

 I as someone that's more Mac-OS.

 That is fine in terms of the tech that I use, but we also need to put the

lens on to what people that develop websites and apps can do.

 Part of it is just supporting some of the stuff.

 So supporting dictation for example by using standard input fields.

 But there's also been a communication shift.

 So modern methods of communication are so much easier for me than they used to be?

 Why, I can use I cons, emojis, stickers, GIFs, I can call someone on Skype, FaceTime, Slack,

whatever, I can send pictures on Snapchat, for example.

 The thing I will stress is that these can cause accessibility challenges for other groups.

 So if you have someone that relies extensively on emojis that, might present a challenge

but they can be useful to augment your language from a dyslexia point of view.

 If for example you want to write something out and make sure you establish tone, sticking out a tongue

emoji can help you make that seem lease ambiguous.

 Someone can think, I can't understand that mode of address, oh there's a

tongue, it's sarcastic.

 To give an example of the messenger apps, Facebook messenger, I can use voice.

 I will just go to messenger and I'll go, I can't type this out, I just hold do unthe bot tonne for

voice and say, the "the thing I want to tell you is this" and it send an audio clip

to someone.

 I can just audio call people, video call people, send pictures, video clips, audio clips, voice call people.

 I can send people my location so if I'm struggling to explain where I am

in relation to people because there is a few complicated clauses, I can send my

location on Google Maps on a pin and say "I'm here, come here", for example, or

stickers and emojis to indicate content.

 I will stress that you don't necessarily want to rely on these things but if

you can provide stuff that allows communication in multiple meth ondz and if you yourself are communicating

through social media for example, it can be beneficial to provide what you are

trying toe talk about in multiple ways through some text and a picture, for example,

where you have got that double barrel way of communicating with people that might

struggle from the text alone.

 What I also struggle with is unstructured text.

 If you have a wall of text, I'm going to struck fromle to read it.

 So something with no headings, lists, for example, no tables, I'm going to struggle to

interact with it because I need stuff to be sectioned out really consistently.

 Where you saw my highlighting text then asking the system to read it back to

me - that is something that relies on it being plain text on a page.

 So if I quickly zoom over to Wikipedia, so, something that I can do is I can say

"can you read some of this text out to me?

" I can't necessarily access text encoded within a picture even if you have

given it an Alt attribute for the benefit of screen readers for example, it's not

something that can be accessed.

 I'm reliant on plain text available as plain text.

 So avoiding images of text unless you have got it available as text,

adjacent to the picture.

 Things like homonyms and homofhenes be aware that if you are putting words down that are the same

near to each other, so the fayre was fair, so the FAYRE, as in the event, was fair,

as in it was OK.

 If we have a spinning plate, that would start to send one of the plates vibrating for me, as opposed to

"the fair was OK" or "the event went well", much easier for me to pars because

there would be less neurolinguistic struggle going on.

 Homophones would sound the same so I'm very much someone that speaks all language out in my head to

myself, almost as a conversation and if I come across something like a pair of

pairs, again that's going to be another one of those things that will set the plates spinning.

 When you are writing copy, you can do things like, in the same sentence or paragraph are we

using different word spelt the same or different words spelt differently but pronounced

the same and can we just tweak some of that stuff with a thesaurus.

 Avoiding about tract or verbose language.

 So practically if you just go go through the copy and draft it and again and get to it

be as simple as plain as you can, as opposed to for example relying on metaphors or figures of speech.

 And having no alternative to text.

 As I mentioned, this is a nuanced one because you don't just want to have just videos, for example,

or just visual content because then that could exclude someone that actually needed something that was

non-visual, like someone who was deaf, blind and using maybe a Braille display and so they

for example would want stuff more available in plain text whereas someone like

myself, I would benefit, for example, if you had instructions, have a list of

instructions and then have some images that augment the instructions, that say, by the way when which say step

one, here is a picture to communicate that, so building in forms of redundancy by

having multiple ways of understanding the same thing.

 Now, to give you one final example - one of the small functional things to be thinking about is how much any

process you develop relies on textual input.

 An example I give is logging into my bank.

 So, back in the day, I would go to my bank account, go to my phone, for example, and I would have to type

out my user name.

 I don't know my user name and, as we have established, one of the biggest challenges is keeping too

many things in my head at once.

 So I go over to last pass and copy the user name to the clip board, then back over to the

app and paste in my user name.

 And then it says to me, "can you give me your password?

" And I say "no, I can't "but I've got it in my last pass because again I can't remember the stuff" even if it's

a simple pass yored.

 You can think of the memory slot, being already taken up by the user name.

 So I go over to last pass, copy the password, come back to the appnd the app says "no, no, no, you left

the app and for security you need to enter your user name again.

" Because I left, I can't be left on the password screen, I need to start at the

beginning.

 Now I couldn't keep my user name and password in my head and that's materially

what the app is requiring, it was requiring user name and password without leaving the app.

 The only way of getting to the bank account was writing down the user name, password and memorable

information on a piece of paper because just from a dyslexia point of view there

was no other way of getting through that flow.

 As you can imagine, that would probably put the backs up of anyone that works at a bank because it would

be a huge security risk.

 If you compare that to what the current flow is, why just use touch ID or face ID?

 Open the app and it goes "we'll take your fingerprint or face "and it's no longer an issue?

 Why, because the flow that involved consistent textual engagement, here is your

password, here is your user name, here is your memorable information that was causing so much friction, suddenly

disappears when you can rely on quicker ways of accessing stuff, like through biometrics and touch ID, face ID,

one-time password, for example.

 Just to really wrap up the final points of what can you do and take away, any content that you

make, be it super example of dyslexia, I can't tell if that word says sufficient or succulent, I'm going to

guess it says sufficient and I hope it does spell sufficient, succinct, yes,

dyslexia eh!

 Be succinct and simple.

 So really just trying to use the simple words, section content.

 Have headings, lists, tables, don't just have big groups of things.

 Use semantics like headings, lists, and alternatives, like provide icons for

things and graphs, images, videos.

 I do not have them as the only way of understanding information, but have

them be a secondary support mechanism, have them be a form of redundancy.

 I'm not going to go into this, but some of this stuff I've taken from the government's do and don'ts

for accessibility and they have some great posters for various user groups including dyslexia for how to design

content that's a bit more friendly for dyslexia.

 And there's also the style guide that more so drills down into good practice

for things like font size, line spacing.

 If you instead want to get a sense of needing to section the contents, having

alternatives, great, but what about the deep-dive into how big should the fant fonts be, the British Dyslexia

Association has some great stuff there.

 Lastly in case there's anymore deaf people on the line, consider providing

alternatives.

 So if you have functional interactions that involve typing stuff out, is there a way that you can complete

that process without typing things?

 So as an example, you could type in your postcode or you could drop a pin on a map.

 So instead of me really struggling to type out potentially big addresses, I

go beep and put a pin on a map.

 Supporting multiple types of authentication.

 Avoiding custom keyboards.

 You might have seen when I was using dictate on Mac-OS I can do a similar thing on the iPhone

but that relies on me having a big dictate button at the bottom of the keyboard.

 If you are using a custom keyboard, that button might not be there and I might

not be able to switch keyboards.

 Again if your app has a based in custom-built app board.

 I might not have the dictate option.

 Supporting auto-fill, especially with apps and websites.

 If you have for example you are asking for personal information that the user is going to have

to enter potentially a million times over the years like their address, name, their user name for example,

e-mail address, then using auto complete just completely evaporates the challenge I

have for dyslexia because suddenly I load a page and it goes "don't worry we have

auto-filled this information" because I only have to set it up once.

 This is something that you can similarly do on apps, so for example using

content-type on iOS to again I just automatically auto-fill the information, again I

only have to get it right once and not the hundreds of times I use individual

websites and apps.

 Making sure when you do illicit feedback from your copy, recruiting test users, so making sure that

you are recruiting from a diverse pool because I can tell you for nothing that if you are only usinger user

testing from age 18-35, you can bring someone like my mother over 65 who perhaps does not

have flow vision, the feedback is going to be much more brutal in terms of how

readable your content is.

 Also finally being aware of the technology that is out there, so where I've shown dictation

software auto-correcting software, text-to-speech and also some of the process

things like biometrics as a better alternative to names and passwords.

 That can support students, staff, co-workers, your end-users and potentially

yourself.

 Hopefully there's been some stuff today that you have thought, that's kind of

cool, I might want to use that.

 Finally, that is it from me, so thank you ever so much for attending.

 If you want to jump in for potentially some Q&A, that will be able to be followed up, you

can also e-mail me.

 I'm going to throw the ball back over to Annie.

 ANNIE: Thank you, Dafydd, excellent points made.

 Hopefully some useful pointers for everyone to take away.

 Finally just a bit more information that might be of interest to you.

 We also run online training sessions on digital accessibility.

 You can find out at AbilityNet.

org.

uk/training and use an exclusive 10% discount can code available to register for this

webinar which is dyslexia10.

 If you could move on to the next slide please, Dafydd.

 And then you can sign up to the newsletter for the latest announcements about digital

accessibility and we have a suite of accessibility services to suit your organisation and finally,

don't forget about our next webinars, it's available at AbilityNet.

org.

uk/webinars, the next sessions are next Tuesday on 6th October when we are joined by Bryn

Anderson from Sainsbury's who'll be talking about its digital accessibility

approaches and then after that, on the 20th October, we have a session on how to do

accessible social media.

 So, thank you Dafydd and everyone that's joined us.

 We'll be in touch soon.

 Bye, everyone!