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Digital inclusion in the Fire sector



Sarah Taylor
20 JANUARY 2026



This is me



Sarah Taylor [she/her]

Assistant Director - Digital, Data and Technology at Essex Fire

Author of Digital Strategy, leading for Digital & Data evolution

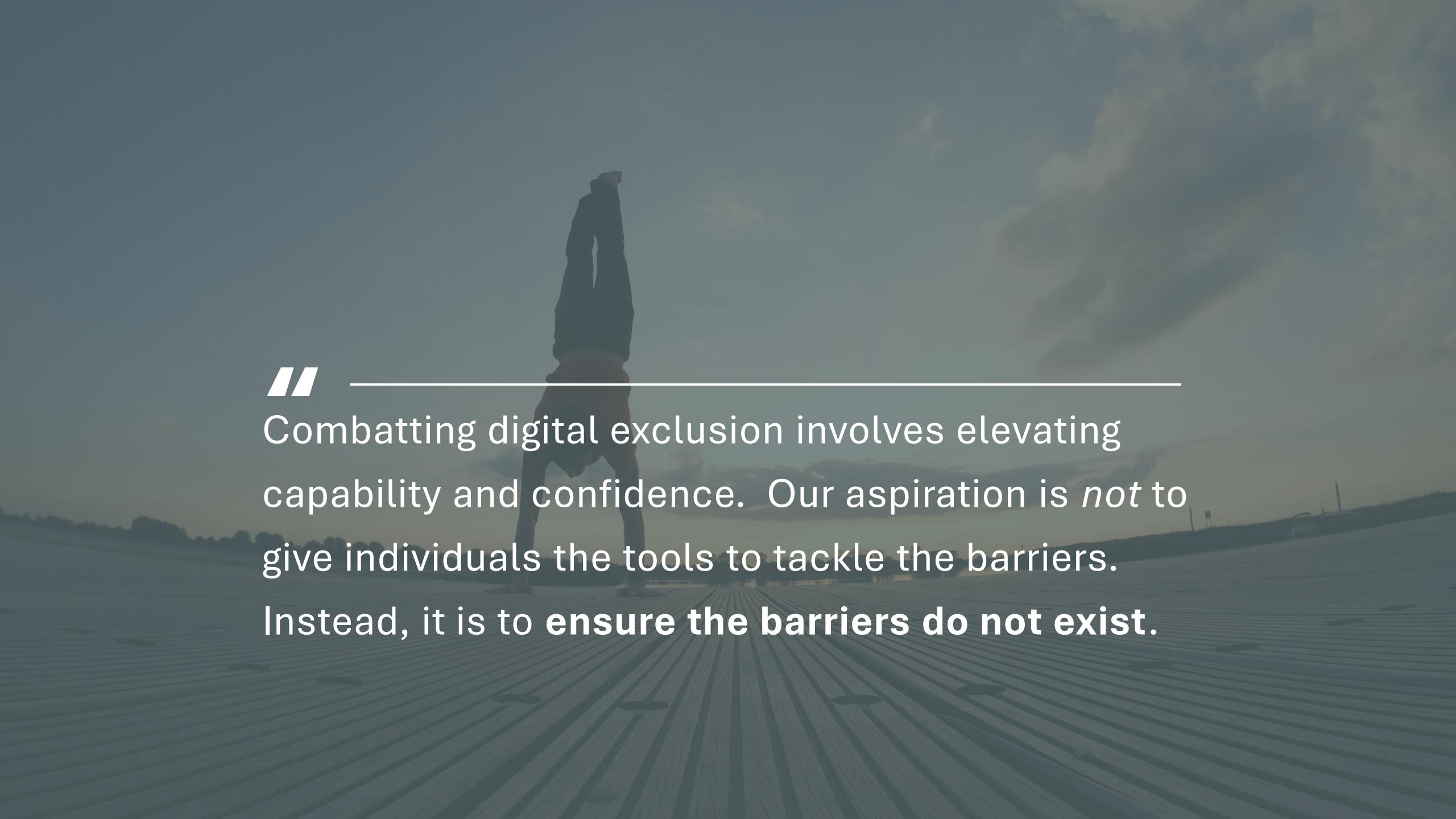
Creator of the Digital Accessibility and Inclusion Group

Vice Chair – NFCC Digital Technology & Cyber Board

Advocate for inclusion

(and I may not be neurotypical)

[linkedin.com/in/sarah-t/](https://www.linkedin.com/in/sarah-t/)

A photograph of a person walking away from the camera on a wooden boardwalk. The person is in silhouette against a bright, cloudy sky. The boardwalk leads towards a distant, hilly landscape.

“ —

Combatting digital exclusion involves elevating capability and confidence. Our aspiration is *not* to give individuals the tools to tackle the barriers. Instead, it is to **ensure the barriers do not exist.**



Aligned thinking in digital leaders in UK Fire

Dedicated roles helping the workforce
Focus on reaching all communities with key messages
Preferring native accessibility improvements
Influence from (no resistance to) big tech

Aligned strategic standards across UK Fire

FIRE
STANDARDS
BOARD

DIGITAL AND CYBER FIRE STANDARD

Desired outcome

A service which...enables and educates its employees to use the technology well.

A service that supports its employees to achieve the level of digital skill necessary to carry out their roles effectively and safely, and to understand their obligations when using technology. Its leaders recognise how critical effective technology is and enables its workforce to fully engage with it.

Aligned strategic standards across UK Fire

FIRE
STANDARDS
BOARD

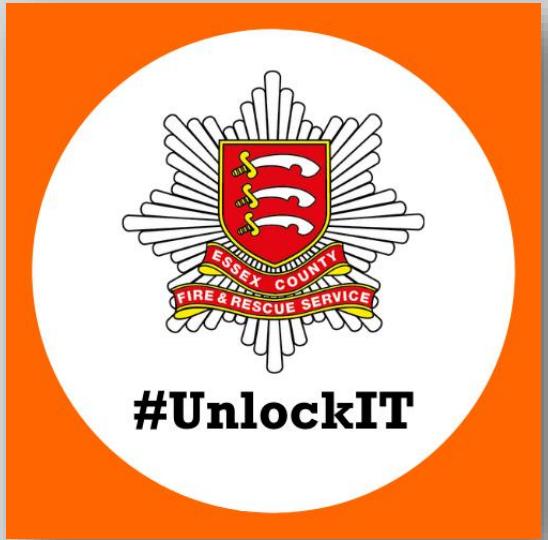
DIGITAL AND CYBER FIRE STANDARD

A fire and rescue service must:

- Demonstrate continual development of digital skill to the standard determined necessary for people in their workforce to conduct their duties well.
- Deliver inclusive and accessible ICT solutions and toolsets, recognising that each workforce and community has different and diverse needs.

DATA MANAGEMENT

- Create a level of data literacy across the organisation, enabling employees to access and use data proportionate to their role.



Digital Skills Officer

Onboarding

Digital Accessibility & Inclusion Group

Personalised support for individuals

Read & Write toolset across the Service

Advocating for individuals

Global Accessibility Awareness Day

COMMUNICATIONS



PRODUCTIVITY



STAYING SAFE



ACCESS TO
INFORMATION

Digital Skills Standard

COMMUNICATIONS



- Sending and receiving email
- Sending and receiving instant messages
- Making and receiving calls on audio visual channels
- Joining and participating in a virtual meeting

- Can navigate to file locations and select the relevant file
- Able to access and edit documents, and save them where people can share
- Able to enter numerical data and perform simple calculations to provide a result
- Can complete a digital form and submit



PRODUCTIVITY



ACCESS TO INFORMATION

- Able to find useful video resources
- Can use different types of search engines (e.g. Intranet, Google, Office 365) to discover specific information
- Can use Workplace, Facebook or LinkedIn to access and follow interesting content
- Demonstrates ability to help themselves in solving a technology problem or question

- Understands why security software (e.g. anti-virus) is important
- Understands why and how to protect certain information
- Can identify potential malware
- Understands how to manage their privacy online

STAYING SAFE



CONNECTION

- Untapped potential
- Fresh perspectives

- Better productivity
- More efficiency

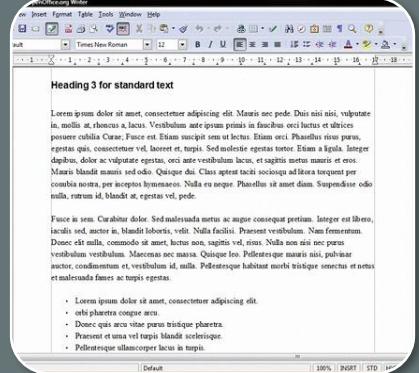
As a keynote speaker at the NFCC's DDaT conference in July last year, I talked about some of elements I have already covered with you, and I advocated for digital leaders in our sector to role model inclusion in digital spaces. What follows is a summarised version of what I had to say. I'm realistic about what actually gets put into practice, but I am sharing this with you because a number of people thanked me for my advocacy for the neurospicy amongst us, and people with other untypical needs. And if any of this resonates, you might want to challenge yourselves on what small steps your company and your products can do to advance inclusion and accessibility. Believe me, people do care, and if you care, you may well have a commercial edge in a competitive procurement.

In the fire service, in all blue lights, in the whole public sector – we like to have lots of reasons to go ahead with something. We call it a business case. Or justifications. Projects, investments, restructures – we link the reason for doing it with the number of benefits that can be achieved or risks mitigated.

This is the opposite of the way people understand something and feel invigorated to do it. People can feel compelled by the sheer magnitude of reasoning, but that's not the same as feeling motivated.

This is why leading, role-modelling, demonstrating intentional inclusion matters. Connection. You want people to connect with what you are communicating.

As a leader in any organisation, if you use people's time yet fail to connect, it's unproductive, and even worse, potentially demeaning or frustrating for some or all of those involved. This is why we need to think about intentional inclusion, and yes I am woke-to-the-core, and proud of it, but even if wokery turns you off, the business case for connecting with people – all people - is strong. It's not a zero sum game by the way. If you make things better for others, it doesn't have to disadvantage you.



Online
meeting
spaces

Real world
spaces
augmented
with tech

Collaborating
on content
creation

On your own:
researching,
learning,
scrutinising

Interacting
with others:
members of
the public,
partners,
suppliers

Digital Spaces

Magnifiers and screen masks

Read aloud

Dictation

Colour and contrast variation

Captions

Translation

Comprehension and vocabulary look ups

Spelling and grammar checkers

Transcription and recording

Artificial intelligence

[CALL TO ACTION #1]



Essex County
Fire & Rescue Service

Join Essex Fire

Request a home safety visit

Using our website



We've designed our website so you can easily change how it looks if you want to.

Changing colours, font, text size and other settings

All modern browsers allow you to change colours and font sizes. We've made sure this doesn't get in the way when you change these settings.

Change text size and font

You can use your browser options to change the text size or font for this website. The way you do this varies depending on the browser that you are using.

Change colour scheme

You can set your web browser to choose your own colour scheme.

Access keys

We haven't used access keys as they can interfere with keyboard navigation in some browsers.

The content is easily tab-navigable and screen-reader friendly.

Is it enough to make your webpages WCAG 2.2 AA compliant? Is it enough to provide accessibility tools for individuals to overcome barriers? Well, first let's applaud the progress made over the last decade with these and other ways technology has grown more inclusive. Big tech suppliers, not least Microsoft, recognised they needed to do more, whether their motivation is true societal inclusion or simply adding the disenfranchised to increase their customer base. Today, we have read aloud functionality, dictation, colour and contrast variation, magnifiers and screen masks, subtitles, instant language translation in closed captions, and even vocabulary look ups to explain uncommon words.

My first call to action is make sure all these great tools are available to everyone in your organisation. Don't make people put their hand up. Some don't even know it's worth putting their hand up. Many people can benefit who don't even know it. Technology has come so far, now mindsets need to catch up.

[CALL TO ACTION #1]

Magnifiers and screen masks
Read aloud
Dictation
Closed captions
Captioning
Translation
Comprehension and vocabulary look ups
Spelling and grammar checkers
Transcription and recording
Artificial intelligence



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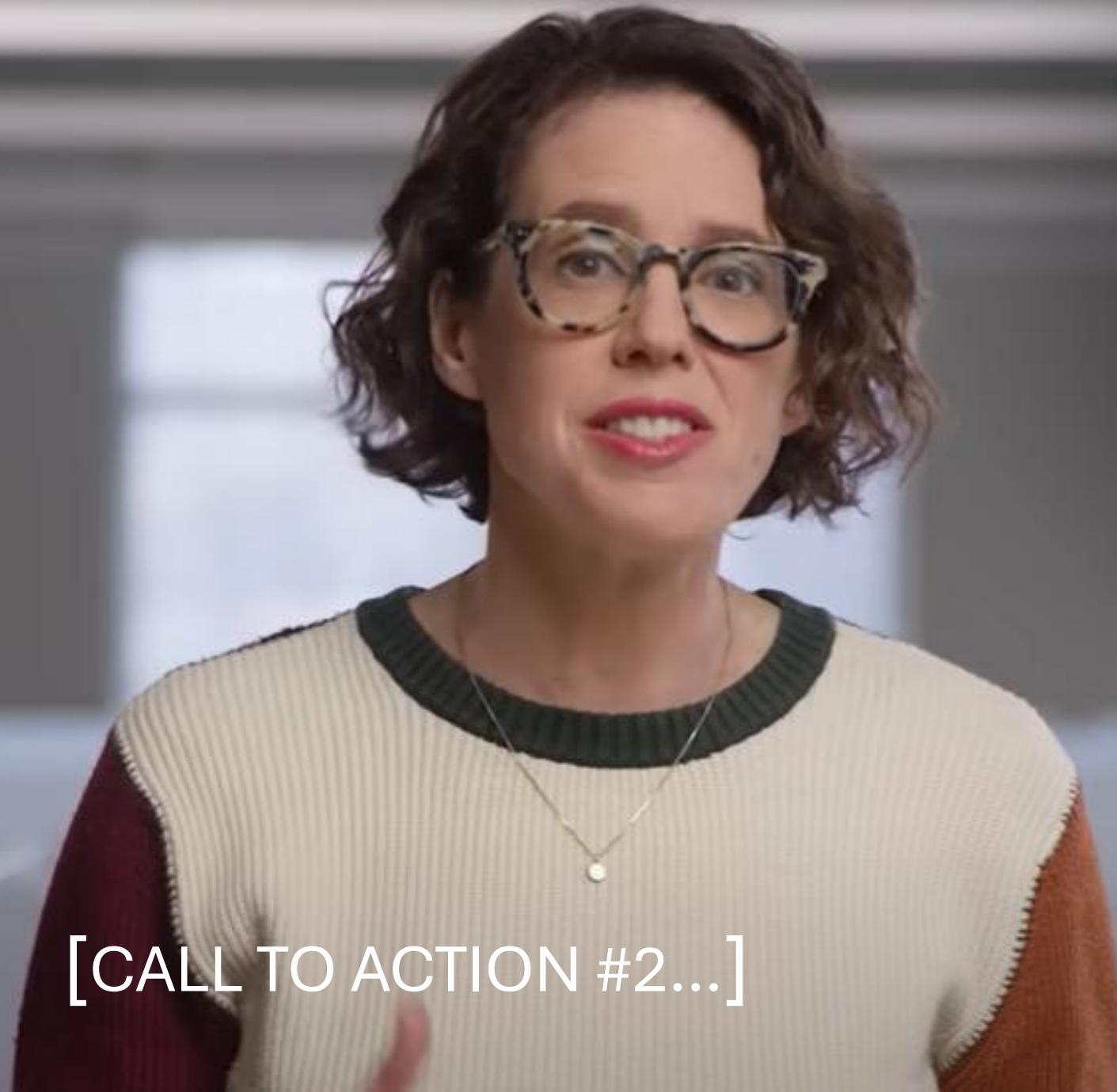
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[CALL TO ACTION #2...]

Amy Gallo

Contributing Editor
Harvard Business Review

**How to get people to listen
to you...**

Listen well

Increase the chances of
being heard

Put important things in
writing

Amy Gallo

Contributing Editor
Harvard Business Review

Firstly, there's a few evidence based principles to keep in mind, as Amy Gallo of Harvard Business Review describes: listen well, increase the chances of being heard and put important things (and only the important things) in writing (before, after or on the slide deck!) From this I have 5 recommendations you can put into practice that can make a tangible difference for many people.

[CALL TO ACTION #2...]

**How to get people to listen
to you...**

Listen well

Increase the chances of
being heard

Put important things in
writing

CONNECTION

Optimise hearing and vision

1

Optimise hearing and vision. Make the starting point that everyone will benefit from all possible communication aids. In digital and hybrid meetings, be on camera and keep your mouth in clear view so people can read both your lips and your expressions. Speaking normally and conveying regular emotions clarifies intent and reduces misunderstanding. Encourage everyone else to do this too. And for goodness sake, use a headset or earphones that isolate your voice and enable you to hear others clearly, regardless of which of you is in a noisy environment. Alongside this, use subtitles by default, so people can hear and see your words at the same time, and you can hear and see theirs – listening and reading at the same time improves the effectiveness of communication. If you do nothing else, this is intentional inclusion 101 – consciously providing the ability to hear clearly, read lips, read expressions and read subtitles.

CO

CONNECTION

1



Optimise hearing and vision

Rebecca Knill

“Technology has come so far. Our mindset just needs to catch up”.



Rebecca Knill is a writer who happens to be profoundly deaf but also describes herself as part-time cyborg because she has cochlear implants which enable her to hear. In 2020 she took to the stage for a TED talk in which she celebrates the progress made in accessible technology. It's not enough though to do it only the name of accessibility. Rebecca says "I want visual options every time there is audio. It doesn't matter whether it's because you are deaf or because you don't want to wake the baby, both are equally valid. Hiding that under accessibility is hiding that from mainstream users. In order to change how people think, we need to be more than accessible, we need to be connected."

Optimise hearing and vision

Rebecca Knill

"Technology has come so far. Our mindset just needs to catch up".

CONNECTION

2

Maximise attention

Maximise attention. People in the workplace have a lot of competing demands, not least from other people using communication in various forms. You have a limited amount of time to capture somebody's attention. So get to the point. Only provide the necessary context for your message to be heard. Attention is the most important currency anyone can give you, so spend it wisely.

If you've employed the three simple steps of listening well, increasing the chances of being heard and putting important things in writing, you should still consider how long can people properly focus for. I reckon 30 minutes at the most, even with a lively debate and interesting topic. OK, you might not need a break in the meeting at this point, but we can consciously consider that we are all different and all valid. Maybe open up your meeting with the intentionally inclusive action of describing the ground rules – *welcome, it's ok to get up and move around during this session, I'm grateful for your participation and want to help you keep your focus here, if you need a few minutes later on, please take them and come back. The transcript is on, so you can catch up when you return.*

CONNECTION

3

Increase understanding

Increase understanding. This point is basically about comprehension, but the word comprehension is not particularly comprehensible, so let's call it understanding. Essentially we need to role-model reducing complexity, particularly as we inhabit the overlapping sectors of ICT and Fire which are full of specialised concepts, mystifying acronyms and unfortunately some people who believe they hold onto their status by talking over the heads of others. Actually, if you are talking in a way that doesn't connect with others, you are wasting your own time as well as theirs. So again, have the subtitles on, have the transcript on – even with the best will in the world you will sometimes use words that are not in someone's vocabulary, and if they can see it spelt out, they can look it up. And harness an upside of AI – if a whole section is difficult to understand, they can pull it from the transcript and ask AI to summarise it, make it informal - whatever works for them.

CONNECTION

4

Reduce exclusion

Reduce exclusion. Please be aware of your language and actions, even though your intent is good. Of course you don't want to exclude anyone, that's not you. I'm going to illustrate my point with a niche personal frustration, but I mean this to raise consciousness about the power of language and actions in regard to any way humans have ever been marginalised, be it gender, race, sexuality, disability or anything else. So hey, who is being marginalised here? You guys don't feel left out, do you?

My confession is that the overuse of the word "guys" is my kryptonite. I work in a profession – ICT – where the majority of people are men or present as men. I work in a sector – Fire – where the majority of people are men or present as men. I do not care that people use "guys" as a gender neutral term or whether you googled it to validate to yourself why I am stupid to find it annoying. Respect my perspective. When I'm the only woman in that space, and when you talk to the assembled people and address them as guys, you are not seeing me, you are not acknowledging me.

Choose your words carefully, especially in situations where strong emotions can prevent people from being attentive listeners. You don't get to police those emotions by the way. You don't get to say what somebody should or shouldn't be offended by, or even if it doesn't reach the level of offending, that it turns them off. Author and communication expert Holly Leeks suggests keeping language simple, clear, direct and neutral – and for good reason – because if you don't, you could lose the connection you are trying so hard to build and maintain.

CONNECTION

5

Create psychological safety

Create psychological safety. Controversial viewpoint warning. Myers Briggs (Katharine Briggs and Isabel Myers, building on Carl Jung's theory of psychological types) have a lot to answer for. You most likely have taken the Myers Briggs test at some point that determined you were an extrovert or an introvert, along with three other personality traits that gave you a satisfying 4 letter expression to label yourself with. EIFP or ISTJ for example. People have been known to proudly wear their personality types on their t-shirts. Sure, if it helps you, go ahead. But as with the other elements such as judging and perceiving, we can all experience extroversion and introversion at different times, even on the same day. It could depend on our health or mood today, what happened just before this meeting, how well informed we are about the topic or a whole range of other things. So recognise this. Don't make this moment the only moment people have to give their input or check their understanding. Deliberately give them other avenues and remind them regularly. You've role-modelled the other steps I've described – hearing and vision, attention, understanding, neutral language – now enjoy the fruits of your efforts in connecting with people who can come back to you through any mechanism that suits them when they have the psychological safety and bandwidth to do so. Sure, there's a point after which their feedback cannot make a difference – so tell them if the deadline to influence is tomorrow. Give their input equal weight though, and value different perspectives you may be exposed to if you consciously enable this. Just because they didn't say it at the time doesn't automatically make it less worthwhile.

EVERYONE IS

WELCOME

Give every bit of
accessibility tech
to every person



[STEP #1]

CONNECTION

- 1 Optimise hearing and vision
- 2 Maximise attention
- 3 Increase understanding
- 4 Reduce exclusion
- 5 Create psychological safety

[STEP #2] ↗

Mindful design

Good contrast in all materials

Provide the materials for review

Complement colour and images with narrative

Apply decent sized text with san serif fonts

Use ragged right edges and short paragraphs

In meetings, put your camera on and use subtitles

Aim for simple and neutral language

Thank you

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