

# Zoom #A11y: Making Virtual Meetings Accessible



*Presented by*  
**@CaelanHuntress**



**STELLAR**  
PLATFORMS

[caelanhuntress.com/masterclass/zoom-a11y/](https://caelanhuntress.com/masterclass/zoom-a11y/)

“What we have are a few people who know a lot about Accessibility. What we need are a lot of people to know a little about it.”



- Matt May, Adobe

# Pew Research Center Survey

Americans with disabilities are three times as likely as those without a disability to say they never go online (23% vs. 8%)

# Masterclass Agenda

- ◆ Web Content Accessibility Guidelines
- ◆ Types of Accessibility
- ◆ Closed Captioning in Zoom
- ◆ Presentation Delivery

# Free PDF



# Meetings and Websites



# WCAG

- ◆ Web Content Accessibility Guidelines
- ◆ A, AA, AAA

# Web Content Accessibility Guidelines

- ◆ **A: Essential.** Assistive technology can read, understand, or fully operate the page or view.
- ◆ **AA: Ideal support.** Required level for public body websites and EU gov.
- ◆ **AAA: High-level support.** Sites for a specialized audience.

# Web Content Accessibility Guidelines

- ◆ Perceivable
- ◆ Operable
- ◆ Understandable
- ◆ Robust

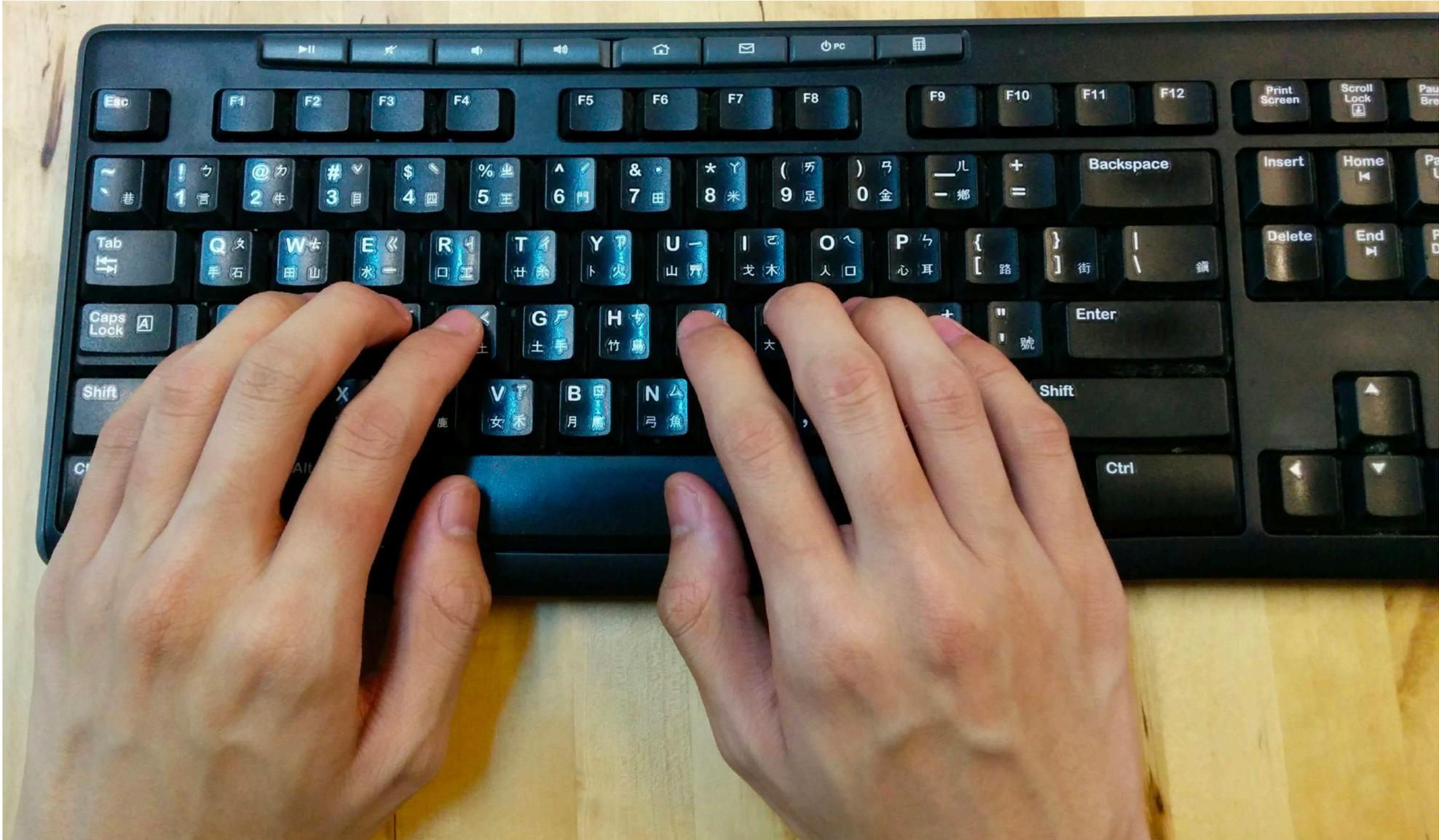
# Perceivable



# Perceivable

- ◆ Web content is made available to the senses - sight, hearing, and/or touch

# Operable



# Operable

- ◆ Interface forms, controls, and navigation are operable

# Understandable



# Understandable

- ◆ Information and the operation of user interface must be understandable.

# Robust



# Robust

- ◆ Content must be robust enough that it can be interpreted by a wide variety of user agents, including assistive technologies

# Web Content Accessibility Guidelines

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# Web Content Accessibility Guidelines

- ◆ Perceivable
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- ◆ ~~Understandable~~
- ◆ ~~Robust~~

# Perceivable

UNIVERSITY *of* WASHINGTON

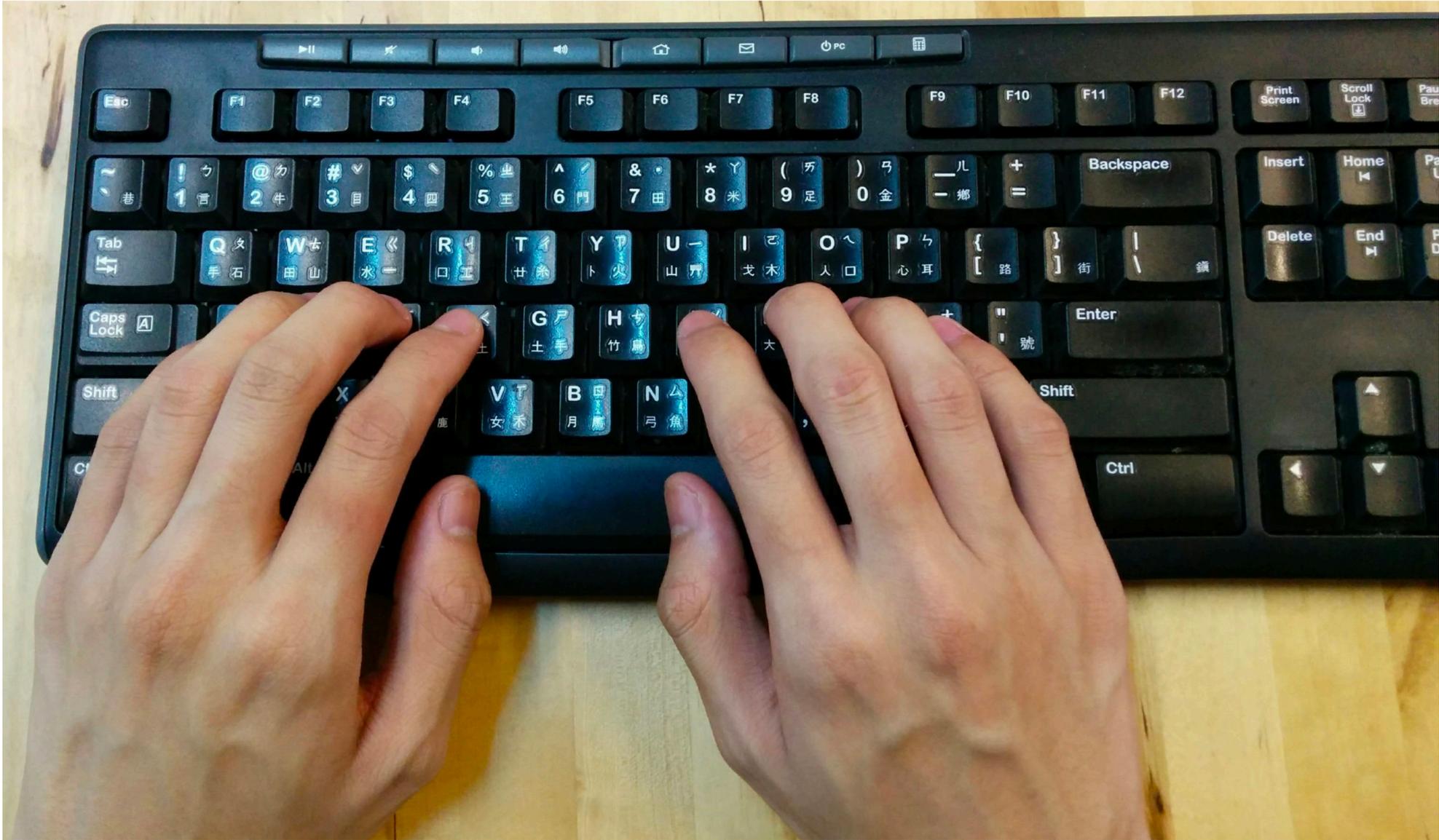
An accessible video includes captions, a transcript, and audio description

<https://www.washington.edu/accessibility/videos/>

# Perceivable



# Operable



# Keyboard accessible

- ◆ Zoom designs interactions that do not require **fine motor control**.
- ◆ Any mouse actions can also be completed with **only a keyboard**.
- ◆ Zoom provides customisable **keyboard shortcuts** that can be enabled globally.

# Visual Icons



# Visual Icons



alt = "Camera"



alt = "Microphone"

# Hamburger Menu



# Hamburger Menu



# Hamburger Menu

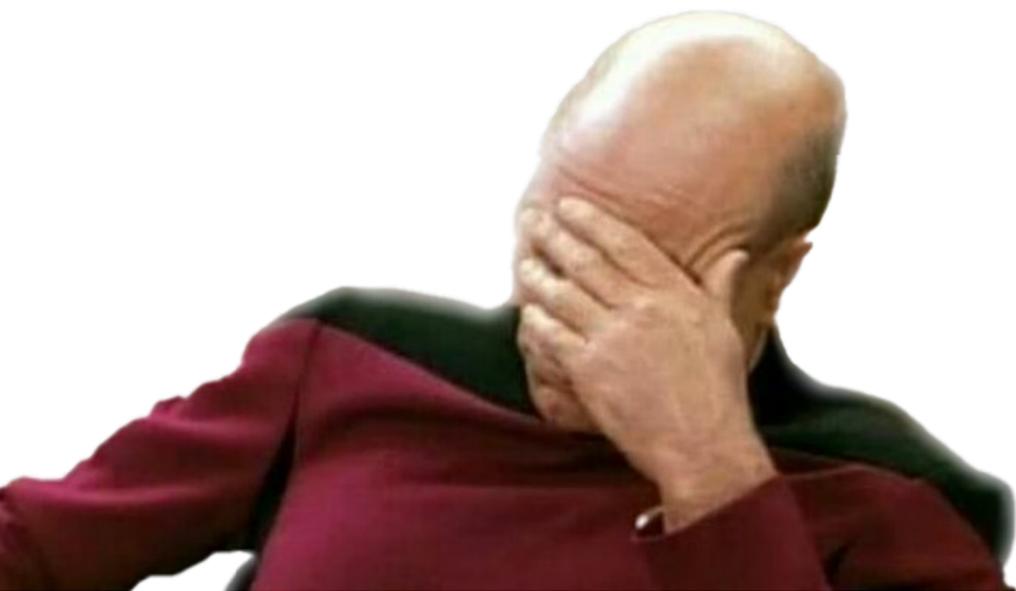


alt = "Hamburger"



@CaelanHuntress

# Hamburger Menu



alt = "Facepalm"



alt = "Hamburger"



@CaelanHuntress

# Inclusive Design Principles

## THE PRINCIPLES

[EXPAND ALL](#)

Provide comparable experience +

Consider situation +

Be consistent +

Give control +

Offer choice +

Prioritise content +

Add value +

Inclusive Design Principles



# Inclusive Design Principles

THE PRINCIPLES	<a href="#">EXPAND ALL</a>
Provide comparable experience	+
Consider situation	+
Be consistent	+
Give control	+
Offer choice	+
Prioritise content	+
Add value	+

Inclusive Design Principles



# Universal Design

“The design of products and environments to be usable by all people to the greatest extent possible, without the need for adaptation or specialised design.”

# Universal Design

- ◆ Use one or two lines of text.
- ◆ Caption the exact wording of speakers, including slang and grammatical errors.
- ◆ Only occasionally edit a few words to facilitate reading speed.
- ◆ Caption sound effects that contribute to the understanding of the content.
- ◆ Synchronise captions with the aural content.
- ◆ Only occasionally change the location of captions on the screen.
- ◆ Use a simple sans-serif font, such as Helvetica, and proportional spacing.
- ◆ Ensure high contrast between the text and background.
- ◆ Use both uppercase and lowercase letters.
- ◆ Use italics to indicate the narrator, off-screen voices, sound effects, and other vital information presented aurally.

# Free PDF



# Visual Design

- ◆ Design with adequate colour contrast, size, and usage of colour for users with different levels of vision needs to clearly understand the content.

# Colour Contrast

Pure green (#00FF00) has a ratio of 1.4:1. **This is green text.**

Pure red (#FF0000) has a ratio of 4:1. **This is red text.**

Pure blue (#0000FF) has a contrast ratio of 8.6:1. **This is blue text.**

# Colour Contrast

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# Colour Contrast

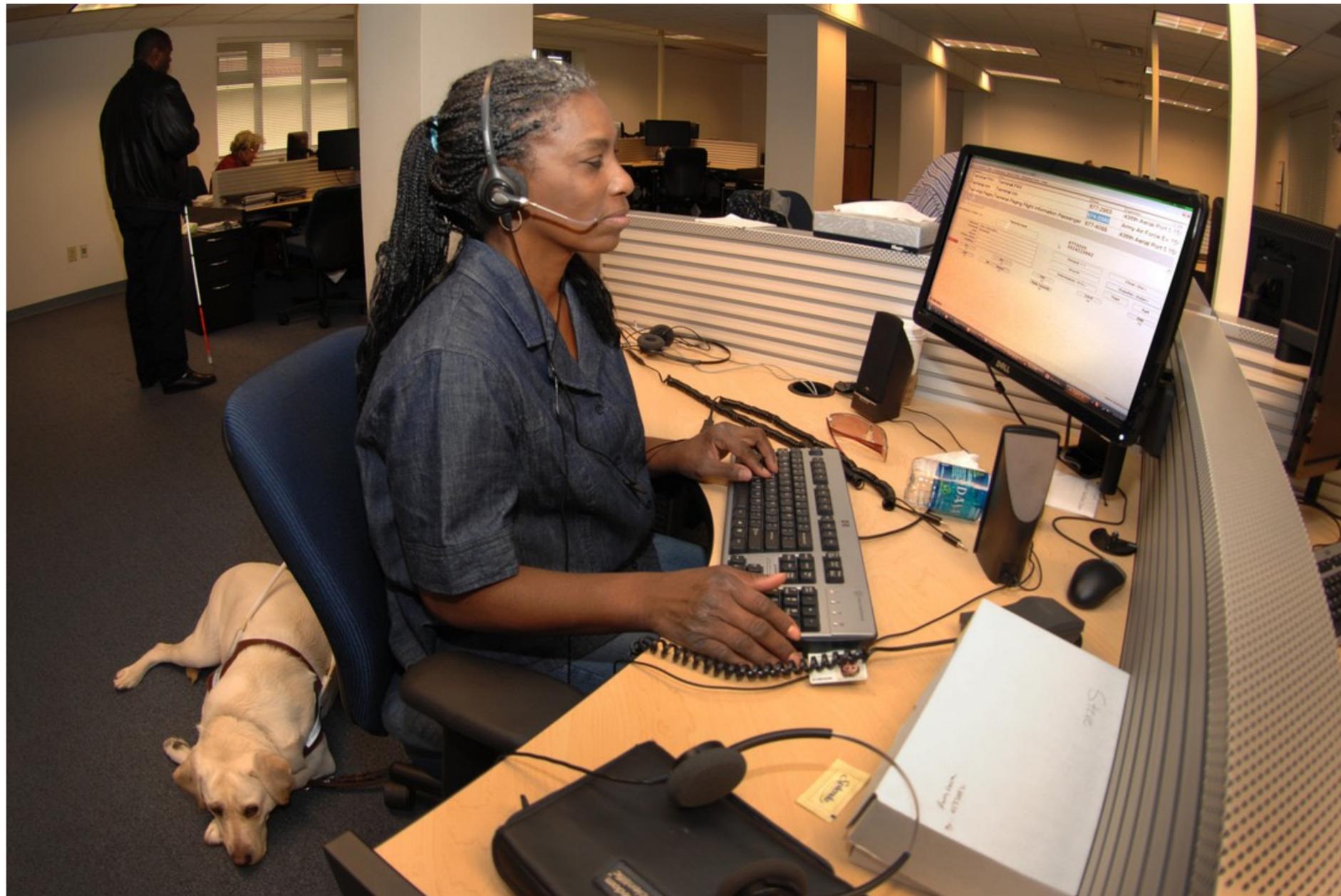
WCAG 2.0		#FFDA00	#EC671A	#CA082D	#7E3487	#0088C0	#00998B	#009F62	#BBD14C
AAA contrast > 7:1	DDDDDD	FFF3AA	F9CCB3	EDADB9	C9AACD	95CDE5	95D5CF	95D7BE	E8F0C3
	454545	5C5000	692E0C	640414	3B1A43	003950	003D37	004027	474F1D
AA & AAA (18pt+) contrast > 4.5:1	CCCCCC	FFED80	F6B38D	E58496	B489B9	80C4E0	80CCC5	80CFB1	DDE8A6
	545454	786800	83390E	710518	471D4D	004F71	00544C	005736	5D6927
AA (18pt+) contrast > 3:1	BBBBBB	FFE655	F4A679	E06F85	A978AF	55B0D5	55BBB2	55BF96	D7E497
	646464	948100	A14612	8D0621	5D2564	005A7D	006159	00663F	72802E

# Colour Contrast



alt = "Success Kid"

# Screen Readers



(U.S. Air Force photo/Nan Wylie)

@CaelanHuntress

# Screen Reader Demo



# Screen Readers

- ◆ Are shared screens accessible to screen readers?

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# Screen Readers

- ◆ Are shared screens accessible to screen readers?
- ◆ No. Participants receive a shared screen as an HD video stream.
- ◆ NVDA, JAWS, VoiceOver, and Android Talkback

# Screen Reader Solutions

- ◆ Share slides and files beforehand, which CAN be read by screen readers.
- ◆ Describe each slide as you present.

“We need to make every single thing accessible to every single person with a disability.”



— *Stevie Wonder*

# Audio Assistance Options

- ◆ **Sign language** - live interpretation has language and dialect differences.
- ◆ **Transcription** - word-for-word translation of audio content into a text file.
- ◆ **Captioning** - synchronised with the visual content. Helps with ESL.

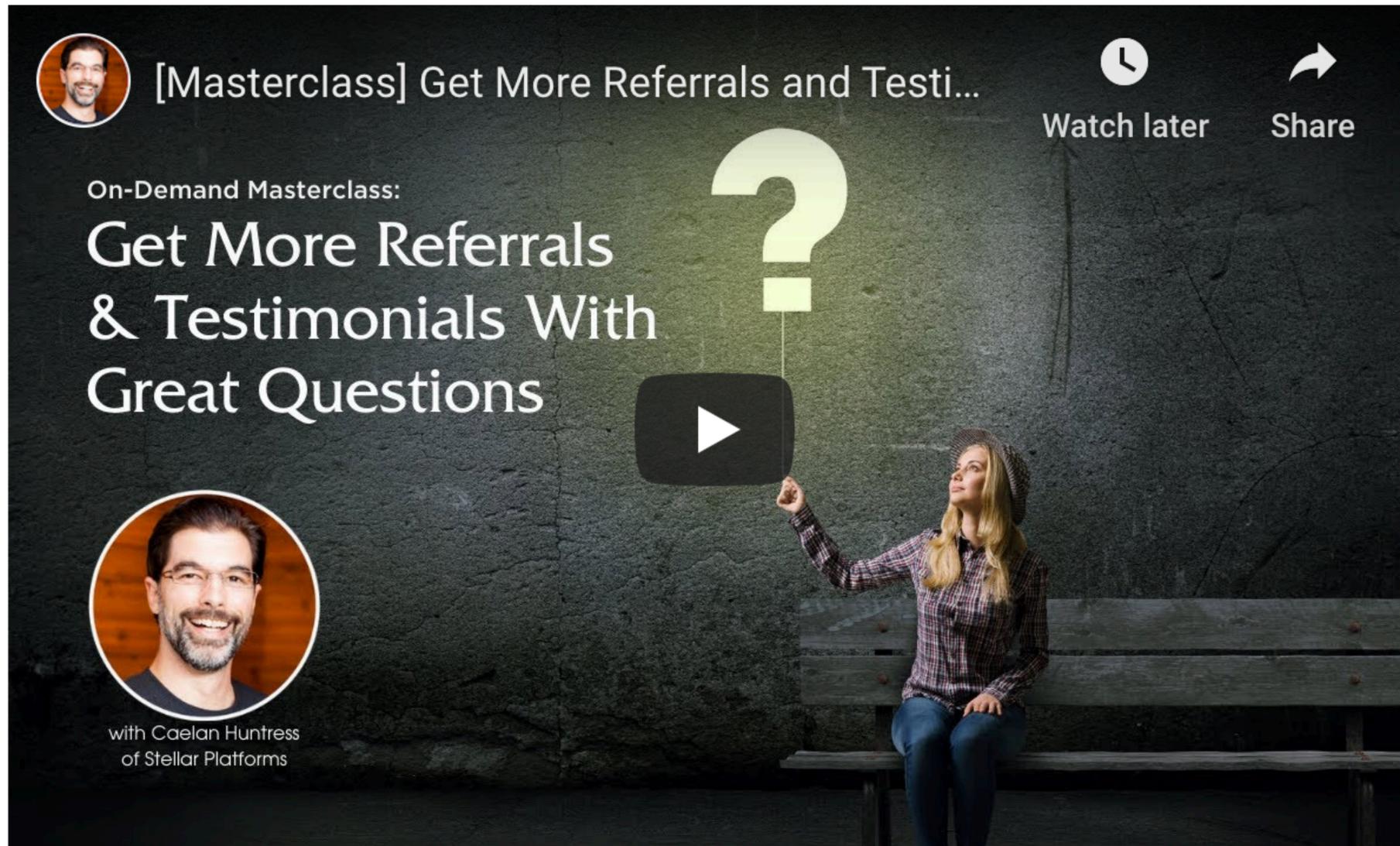
# Sign Language

The screenshot displays a Zoom meeting interface with a grid of 30 participants. The participants are arranged in a 5x6 grid. The top row includes Alan Wendt (highlighted with a yellow border), Caelan Huntress, Lana Razumov, Amy Williams, Frank Lid, and Melissa Dinwiddie. The second row includes Stephanie Schwab, Patrick McNeil, Dan Heck, Alicia Avrach, Lisa, and Shannon Paris. The third row includes Clarielle Chang, Naga Dhoopati, Cher Holton, PhilleenD, Elaine Lung, and Lyric Traveler. The fourth row includes LidmilaD, Caelan, Bob, Waima, Cheryl Swenson, and Glenda. The fifth row includes Erik Forrester, Jeremy Anderson, Sami, Rachel Fitness, Brittany Riordan, and Allan Drew. The control bar at the bottom shows options for Mute, Stop Video, Security, Participants (39), Chat (3), Share Screen, Polling, Pause/Stop Recording, Breakout Rooms, Reactions, More, and End. The top of the interface shows 'Recording...' and 'Speaker View'.

# Sign Language



# Transcription



7:25

So now we're going to talk about the two most profitable questions you

7:29

could ask in your business.

7:30

If you get in the habit of asking these questions. These two questions will make you more money than anything else you can ask.

7:38

You ready?

7:41

Will you refer me a new client?

7:44

And will you give me a testimonial?

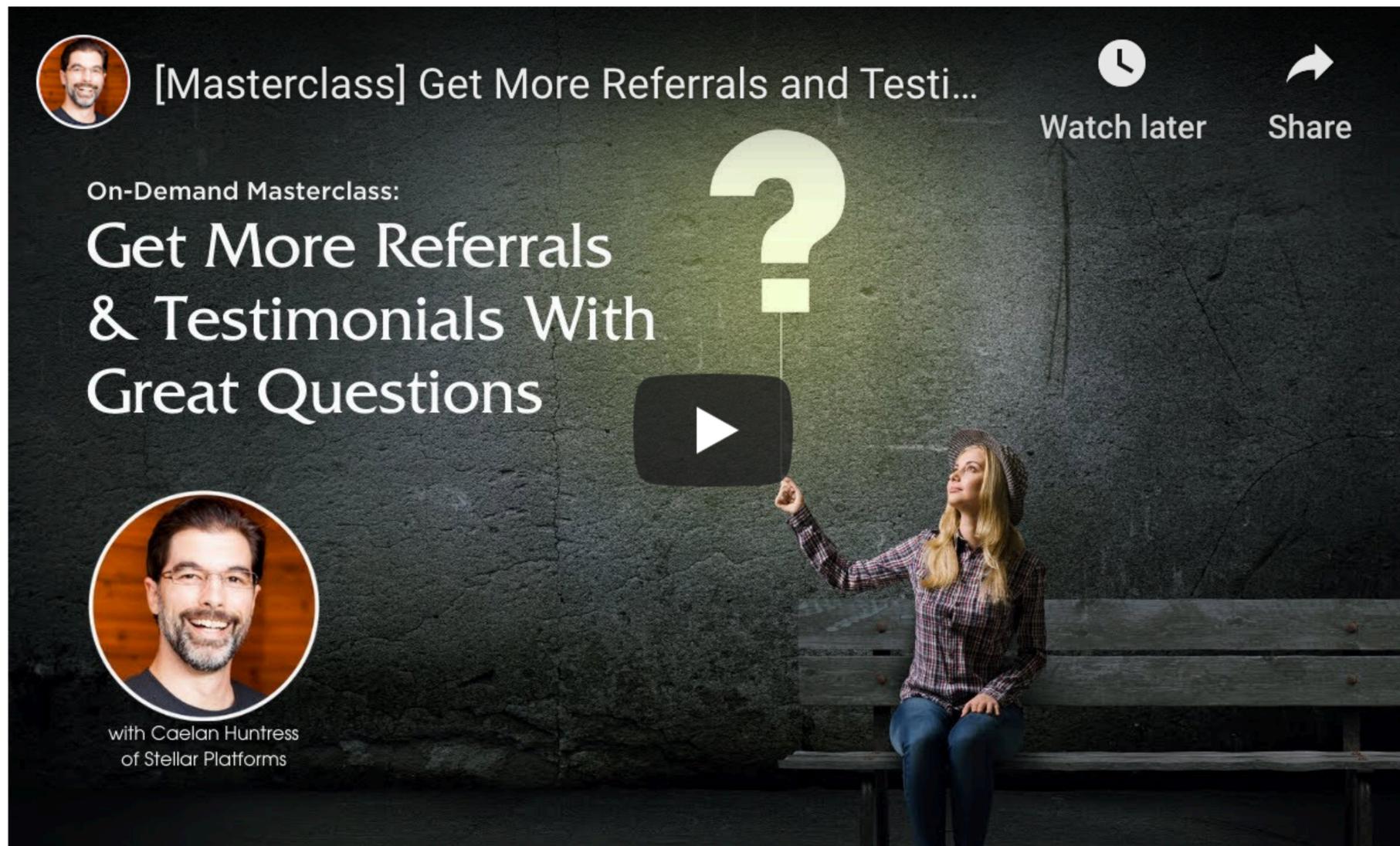
7:47

That's it. There's not a secret formula here. These are the most profitable questions you can ask.

7:52

And they're simple.

# Transcription



[Masterclass] Get More Referrals and Testi...

Watch later Share

On-Demand Masterclass:  
**Get More Referrals  
& Testimonials With  
Great Questions**

with Caelan Huntress  
of Stellar Platforms

The video player shows a woman sitting on a bench, holding a large question mark on a string. A play button is overlaid on the video.

7:54

The way that you ask it and the way that you phrase it might vary, but asking These questions is going to increase your reputation and get you more of the better kinds of clients. Statistics show that customers that come to you, by referral, on average have a 16% higher lifetime customer value, it means that they're more likely to buy from you, they're less likely to leave, it's easier to close them. Having a customer come to you through referral doesn't need all the validation as a stranger off the street, because they heard from somebody that they trust that you were the person to talk to. So with referral customers are statistically so much better than customers that come to us through other means. Why don't we

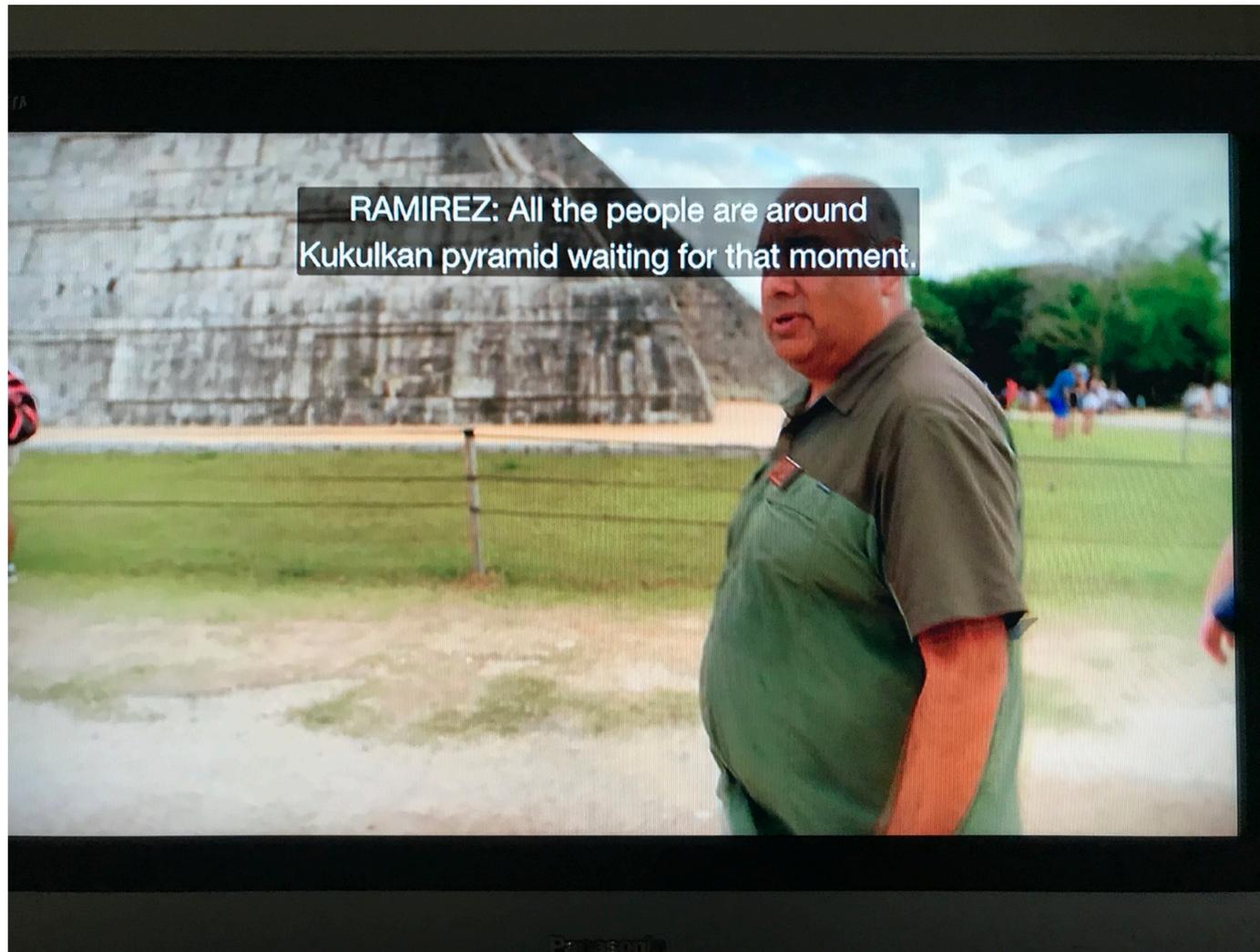
8:48

ask everybody all the time?

8:52

Well, I think there's a few reasons why. And the first reason is we don't want to make our customers uncomfortable. They put all this trust into us. They've invested in us, they've been paying us money. And if we show up with a really cheesy, canned question that makes them feel uncomfortable, that threatens our livelihood. That can make it less likely that they're going to buy from us in the future. So not making customers uncomfortable. This is really important. We don't want to threaten our relationship with them.

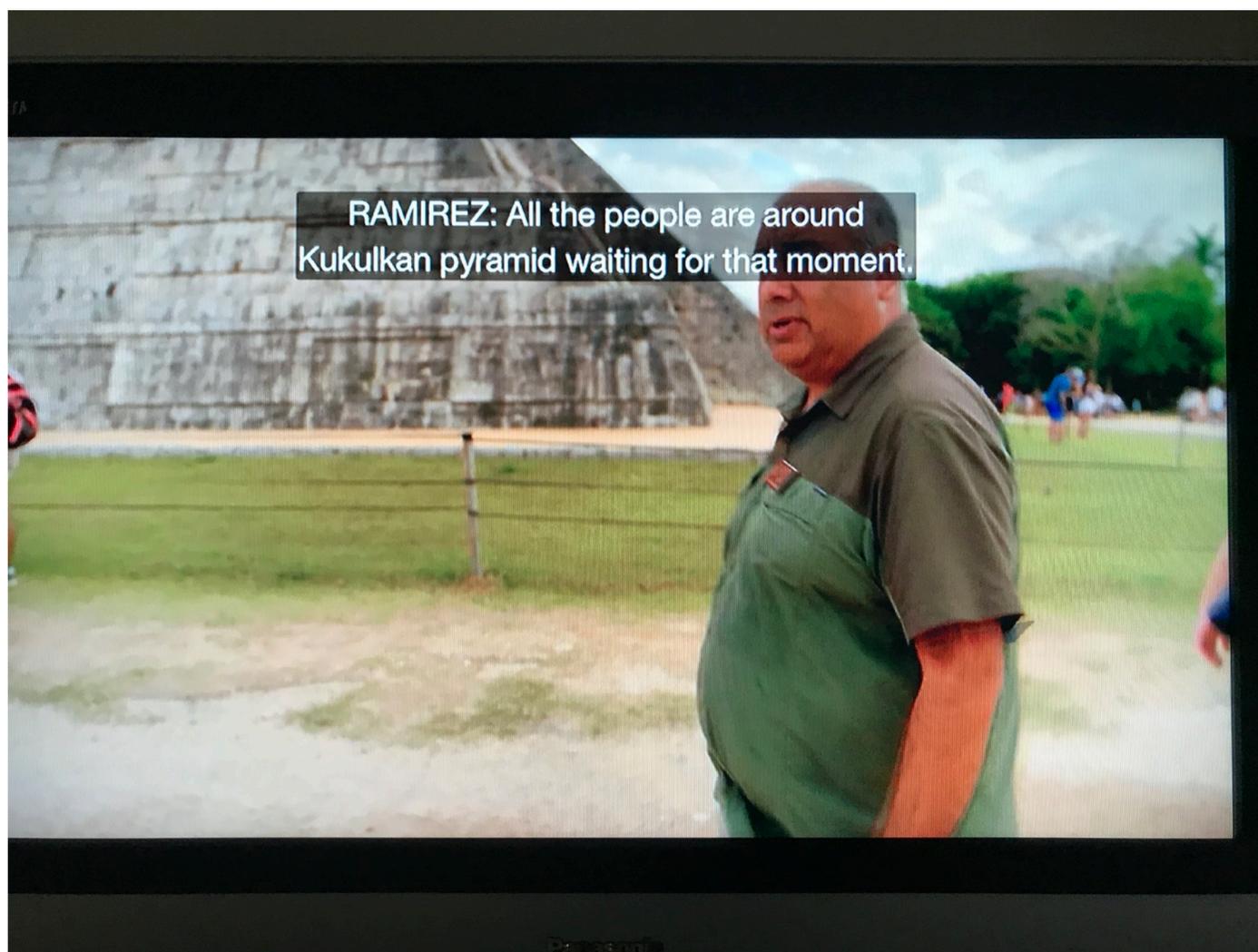
# Closed Captioning



# Universal Design

To employ universal design, a production should be filmed so that critical visual content does not appear where captioning will cover it.

# Closed Captioning



# Types of Captions

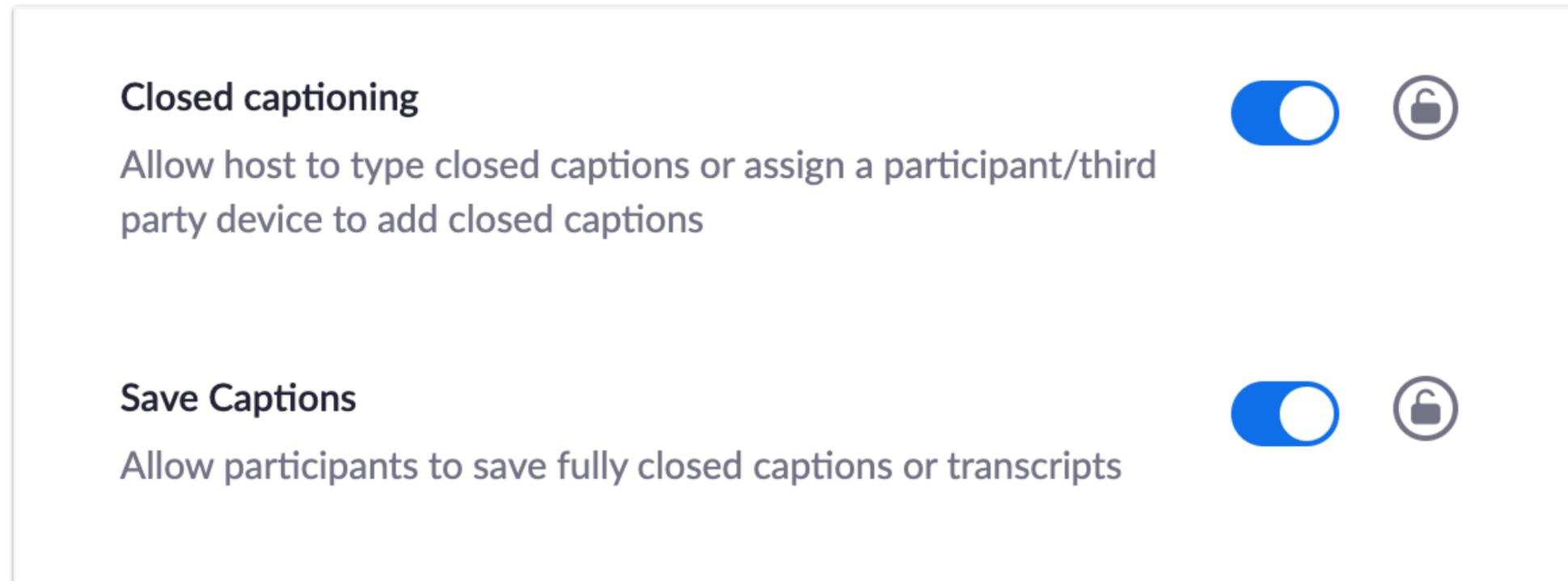
- ◆ **Off-Line Captioning:** Created after video has been created.
- ◆ **Real-Time Captioning:** Live feed.
- ◆ **Open Captioning:** Appears whenever video is presented, for every viewer.
- ◆ **Closed Captioning:** Can be turned on or off, toggled by built-in decoders.

# Captioning Options

1. Add transcript to captions in replay
2. Type manually during presentation
3. Share with Google Slides for quick CC
4. Purchase 3rd party CC service

# Closed Captioning

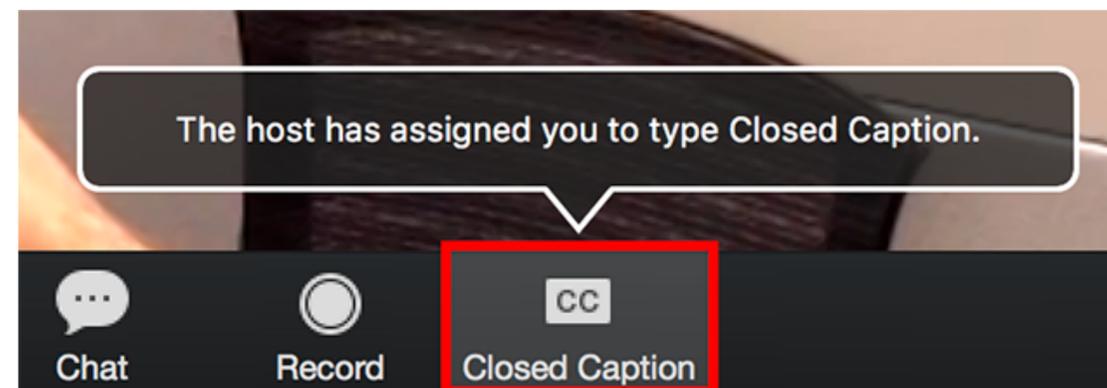
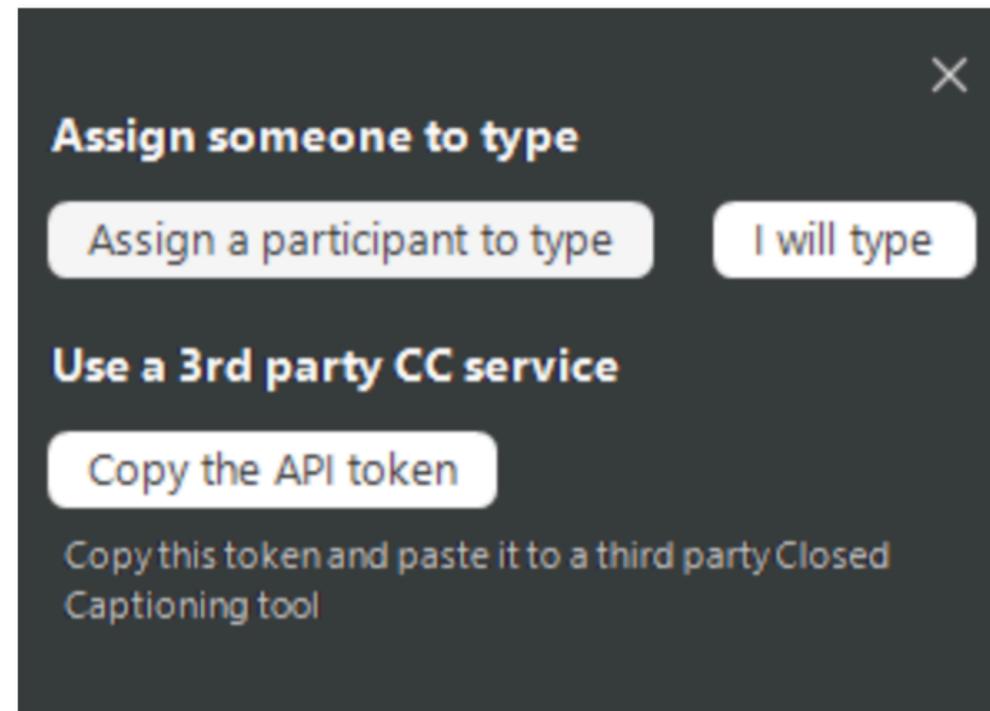
- ◆ Turn on closed captioning in <https://us02web.zoom.us/account/setting>



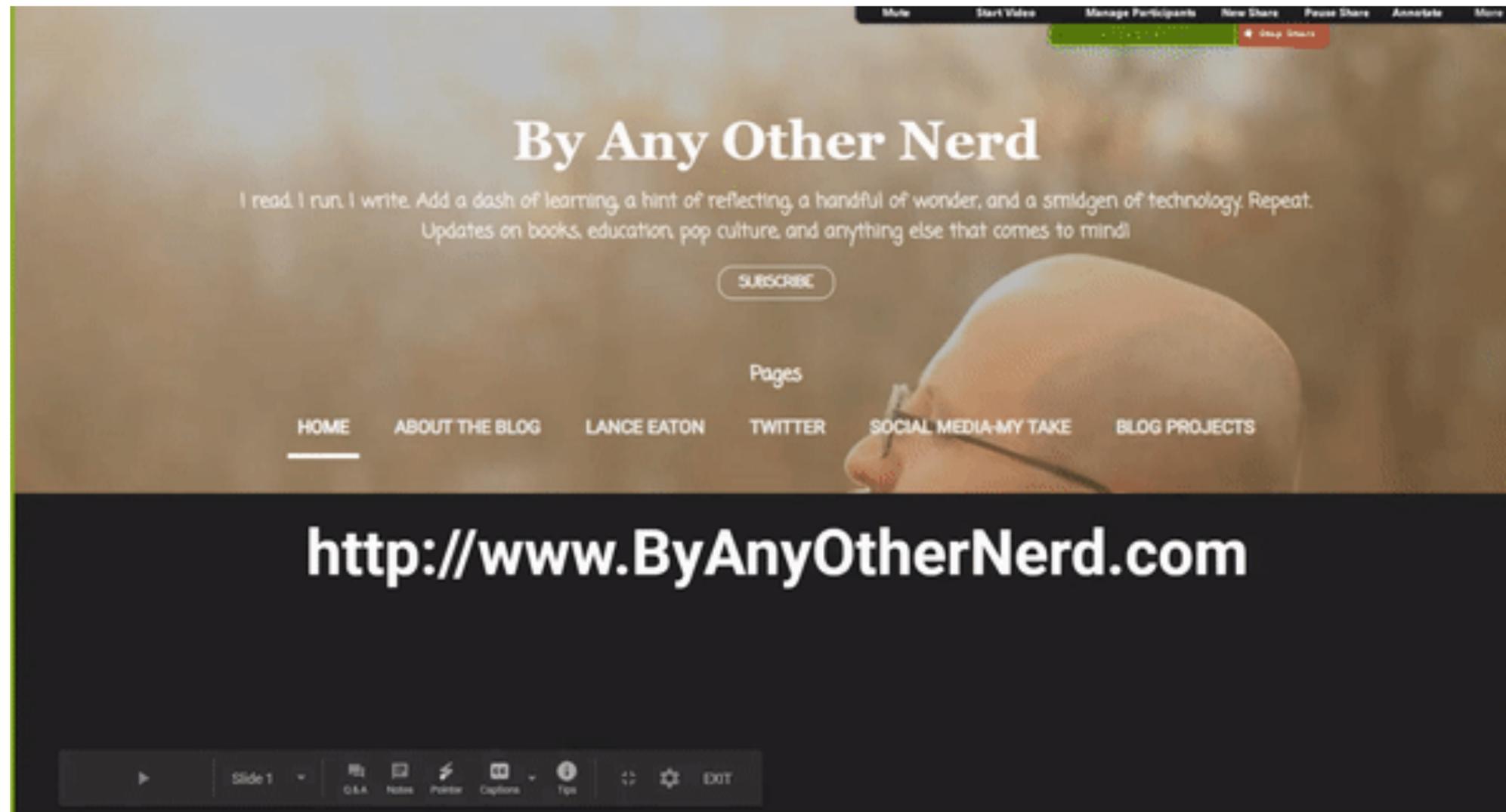
The screenshot shows two settings in a Zoom account settings panel. The first setting is 'Closed captioning', which is turned on (indicated by a blue toggle switch) and has a lock icon to its right. The second setting is 'Save Captions', which is also turned on (indicated by a blue toggle switch) and has a lock icon to its right.

<b>Closed captioning</b> Allow host to type closed captions or assign a participant/third party device to add closed captions	<input checked="" type="checkbox"/>	
<b>Save Captions</b> Allow participants to save fully closed captions or transcripts	<input checked="" type="checkbox"/>	

# Closed Captioning



# Share with Google Slides



<https://www.youtube.com/watch?v=XfXHfQnQsJk>

# Real-Time Captioning



# Real-Time Captioning



- ◆ Automated AI transcription
- ◆ Human transcription

# Real-Time Captioning



# Real-Time Captioning



# Real-Time Captioning



\$0.06 - 0.60 / minute

# Before the Meeting



# Before the Meeting

Share accessible versions of  
presentations files

# Before the Meeting

Share an agenda with an outline, names of presenters, and key acronyms commonly used by your group

# Presentation Delivery



# Presentation Delivery

Describe each slide verbally  
that is presented visually

# Presentation Delivery

Describe each slide verbally  
that is presented visually

for people with visual impairment  
(or connecting via phone)

“When speaking of disabilities, the blind and their needs are most often used as an example. It is deceptively simplistic since accessibility is something most of the population can benefit from.”



- Marcus Österberg

# Presentation Delivery

Show, then Pause.

Chat, then Pause.

# Presentation Delivery

Show, then Pause.

Chat, then Pause.

Repeat questions from  
audience members.

# Facilitating Discussion



# Facilitating Discussion

At the beginning of the meeting, ask all participants to introduce themselves.

# Facilitating Discussion

Ask participants to talk one at a time, and encourage participants to state their name every time they speak.

“Caelan speaking...”

# Facilitating Discussion

Repeat what you think you understand, and ask to clarify or repeat the portion that you did not understand.

# Facilitating Discussion

Raise your Hands:  
allows audio impaired to be  
called on and participate



TOHRU - Trace Online  
Hand Raising Utility

# Free PDF



# Zoom Host Intensive



# Digital Badge



1 CEU



**Patrice Dennis**

Programme Manager at  
Blueprint for Learning

April 28, 2020, Patrice was a  
client of Caelan's

Caelan worked with my team recently and supported us to move from face to face workshops to webinar series. This was at a really challenging time during Covid-19 climate, and under an enormous time pressure. Caelan was great to work with - he quickly grasped what we needed to do, understood our product, audience, and facilitators, and worked closely with the team. Caelan kept us all on the same page despite many moving parts - communicated quickly and clearly and ensured everyone had the information they needed. The end product was high quality webinars, and a confident team using brand new tech in a forum none of us had experienced before. Highly recommend.

# Virtual Exercises

- ◆ Icebreaker Exercises
- ◆ Whiteboard Exercises
- ◆ Breakout Room Exercises
- ◆ Engagement Exercises

# Discussion Questions

- ◆ Conversational Questions
- ◆ Open-Ended Questions
- ◆ Collaborative Questions
- ◆ Introspective Questions

# Technical Mastery

- ◆ Calendar Tech
- ◆ Audio/Visual Tech
- ◆ Screenshare Tech
- ◆ Recording / Streaming Tech



## **Angela Gruar**

Manager, Learning and  
Development at Te Pou

April 28, 2020, Angela was a  
client of Caelan's

Caelan worked closely with us to move our workshops from face to face delivery to virtual webinars in response to Covid-19. Our workshops are related to mental health and addiction, so it was important to still have high engagement with at times sensitive material, while providing a safe space. Caelan was able to work with our team providing advice on how best to use technology, in particular Zoom to achieve our learning outcomes of the workshops. He spent time with our internal staff, and external facilitators training them to best use zoom, and how to work best via webinar. Caelan worked quickly, with humour, provided a huge amount of support to the team, and was very professional. We are very pleased with how the webinars are now running.

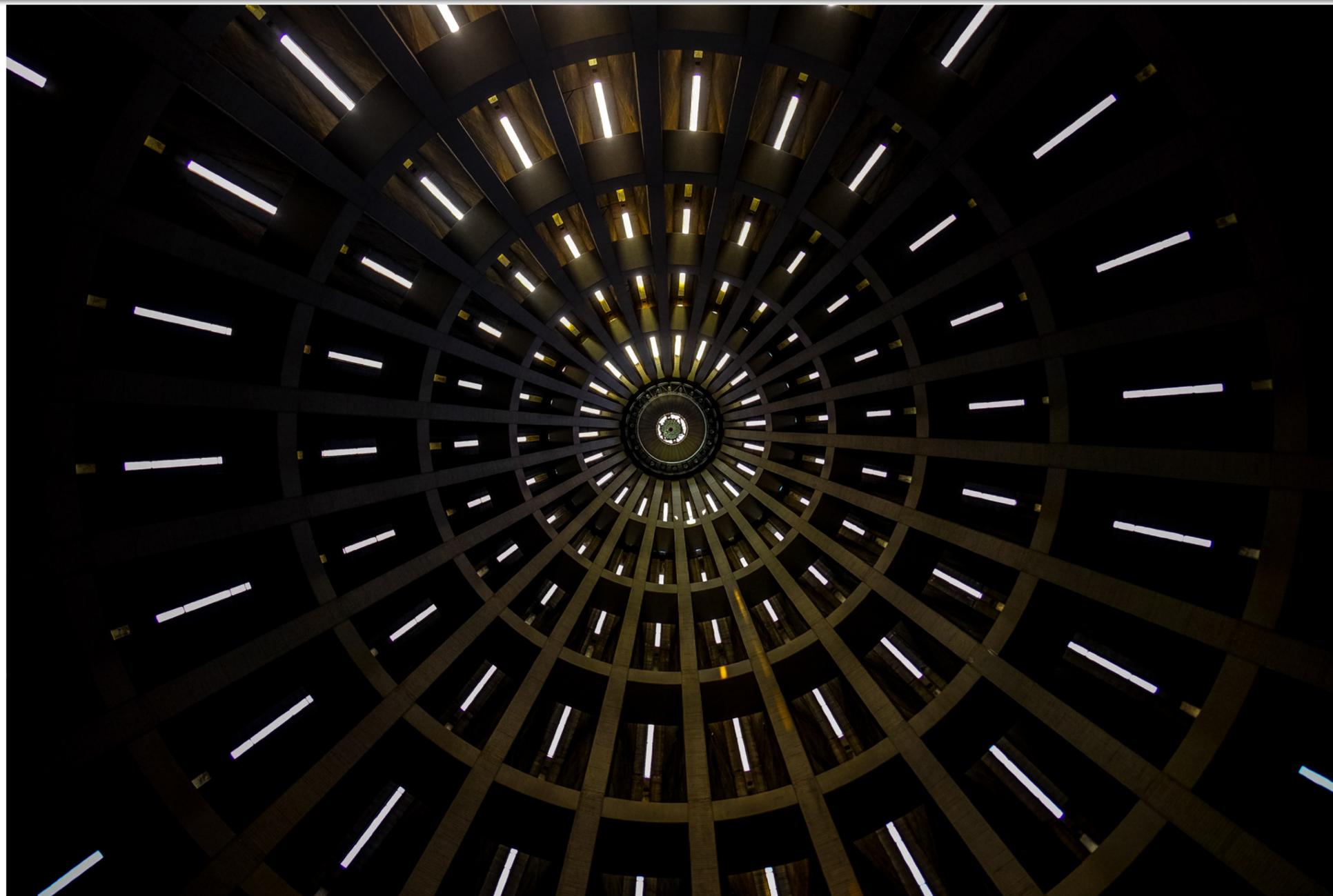
# 4x 90minute Live Workshops



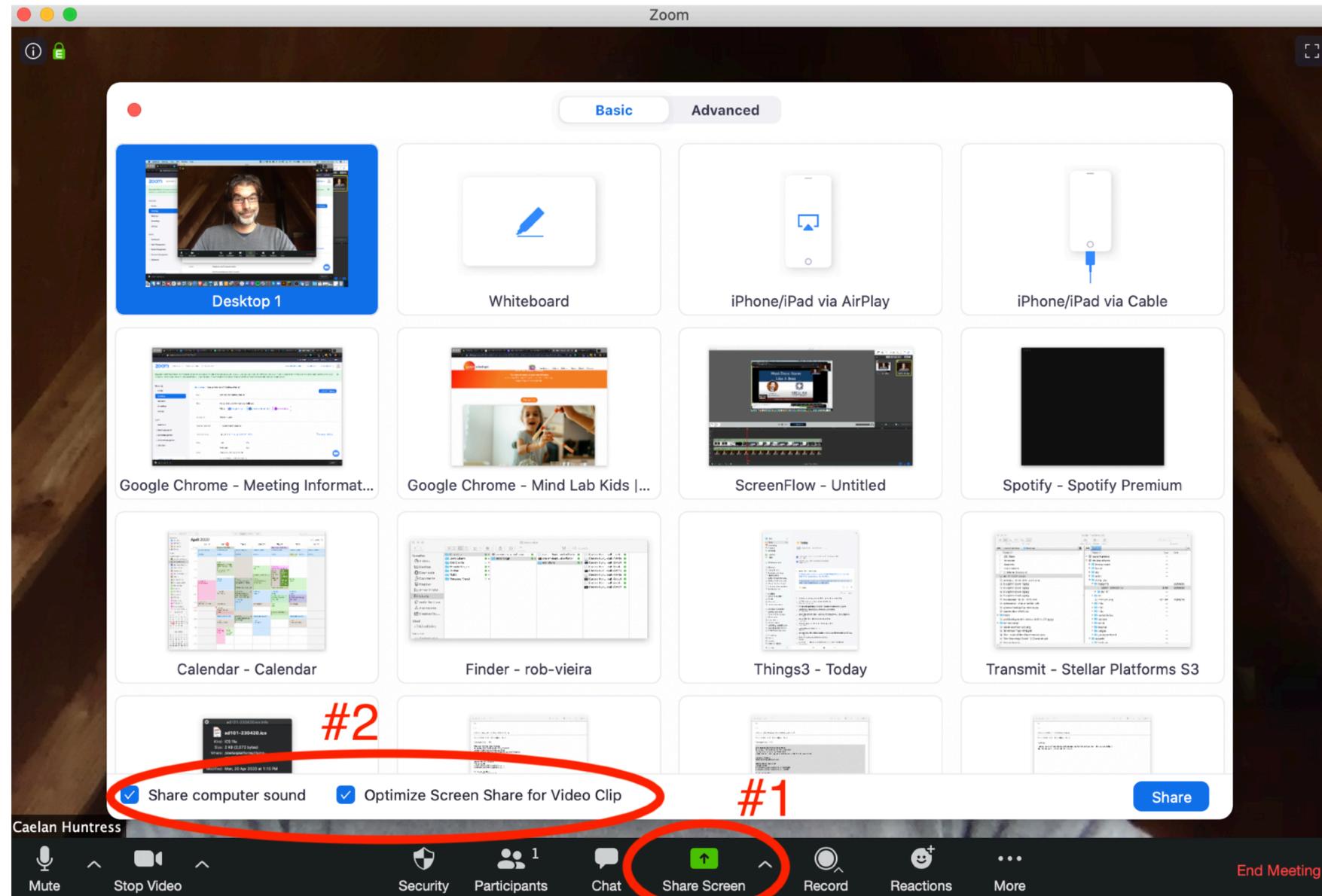
# Who Is This Program For?

- ◆ **Teachers** leading a class of students
- ◆ **Coaches** facilitating virtual groups
- ◆ **Speakers** presenting to a remote audience
- ◆ **Managers** leading distributed teams

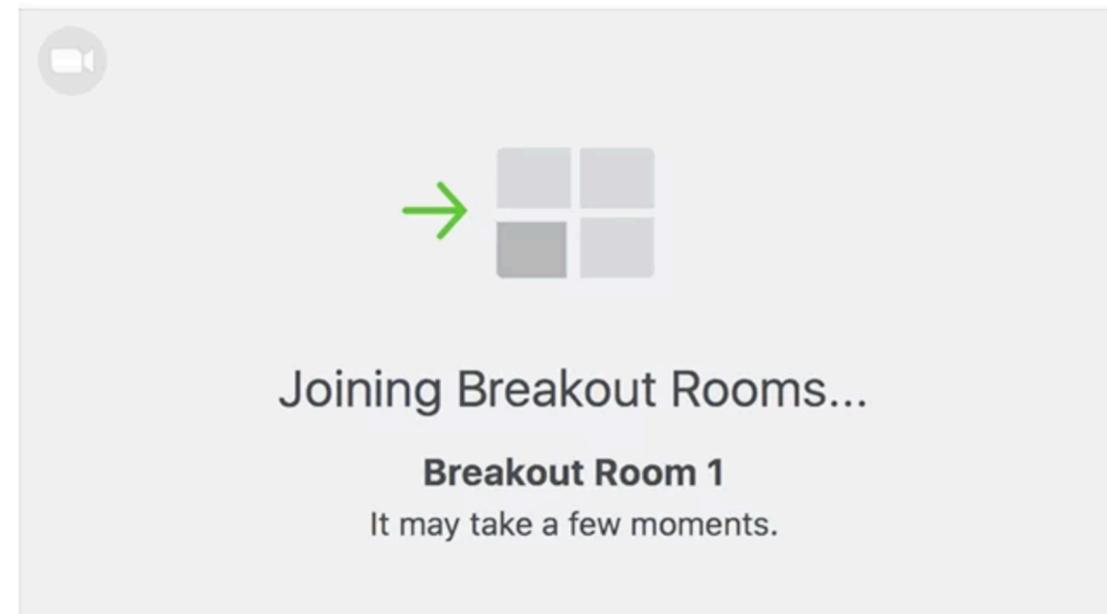
# Connection Speed



# Sharing a Screen



# Breakout Rooms



# Polls

Polling Questions in Progress 00:00:19

Attendees are now viewing questions 1 of 1 voted

1. What is your favorite color?

Red (0) 0%

Green (0) 0%

Blue (1) 100%

End Poll

# Digital Badge



1 CEU

# Moving Together



# Zoom #A11y: Making Virtual Meetings Accessible



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[caelanhuntress.com/masterclass/zoom-a11y/](https://caelanhuntress.com/masterclass/zoom-a11y/)