



COLLEGE of AMERICAN
PATHOLOGISTS

PRESENTERS PROGRAM:

**BEST PRACTICES FOR DEVELOPING
PRESENTATION SLIDE DECKS**

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HOW TO BUILD AN EFFECTIVE SLIDE DECK



You're a subject-matter expert, and you've been tapped to create a slide deck—a collection of slides used as visual aids during a presentation. What do you do?

Whether this is the first time you'll be creating a slide deck or your thousandth, we all can continue to develop and hone our presentation development skills.

There is so much information out there when it comes to presentation development! A quick online search of best practices yields hundreds of millions of articles on how to build an effective slide deck.

So, which practice should you follow?

While there is no hard and fast, or definitively right or wrong way to developing slide decks, some people do struggle to see the information they're to present as a story and how to build effective slide decks to complement their story. This guide is intended to help you thread the available College of American Pathologists (CAP) templates and resources with some of the most common layout and design, and audience engagement best practices.

GET STARTED

As you review the presentation request(s) you might have received, consider the following decision tree:



If you have determined a slide deck is necessary, before dabbling with slide layouts and graphics, start with developing an outline for the slide deck*. Much like when working on longform writing or academic essays, outlines can help writers—or presenters—organize your flow of thoughts, define the story you'd like to tell, and determine what you would need to support how to tell your story.

* See the full list of resources in the Reference section on page 15.

SHAPE THE OUTLINE OF YOUR STORY

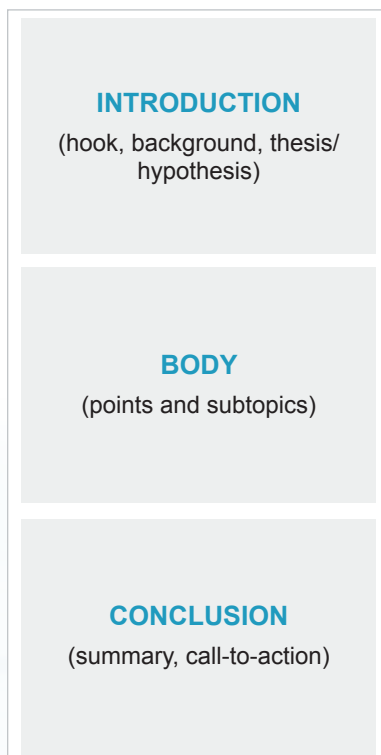
A tried-and-true presentation outline* often includes the following:

- Introduction/Opening:** Tell them what you're going to tell them
- Body:** Tell them
- Summary:** Tell them what you told them

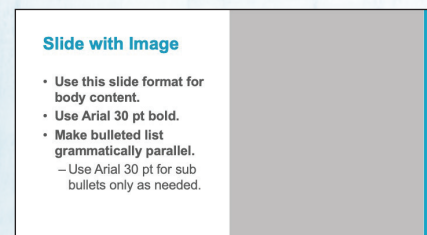
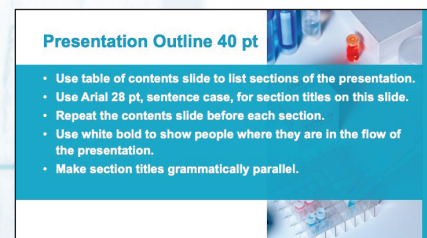
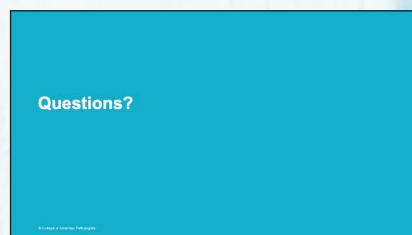
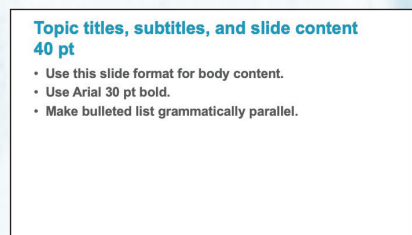
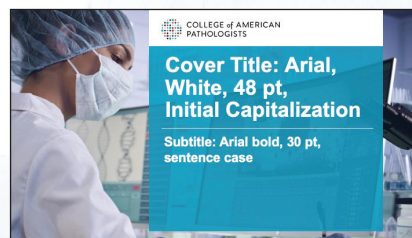
As you define the story about the information you'd like to tell and develop your presentation outline, consider the following series of questions:

1. What's the core topic of this presentation?
2. What's in it for the audience? What would you want your audience to know, feel, say or do after attending the presentation? What top three ideas would you want them to remember or act on?
3. Will this presentation be delivered in person, virtually, or in a hybrid format?
4. What are the audio/visual requirements for this presentation? What are the slide size ratio requirements (ie, 4:3 or 16:9 ratio)?
5. Will audio/visual technology be available to support presentations with video or audio files?
6. How much time are you allotted? Will someone be introducing you or will you need to do a self-introduction?
7. Does the allotted time include a Q&A session, or will there be additional time after the presentation for Q&A with the audience?
8. What's the audience's level of understanding on this topic? Is it a new concept? Or have they heard variations of it, and you are introducing a new or unique perspective? How much breadth or depth will you provide based on the audience's existing understanding of this topic?
9. Will you be delivering this presentation domestically or abroad? Is this a non-U.S. based, international audience? If so, what is your proficiency in speaking the local language? Or what is the audience's comprehension level for the English language?

STANDARD PRESENTATION OUTLINE FRAMEWORK



SAMPLE SLIDES BASED ON OUTLINE FRAMEWORK



KEEP IT SHORT AND SWEET

If you search online, you'll likely find more than a dozen different slide deck development rules. But which one might make the most sense for your presentation?

For reference, below is a table summarizing the attributes of just a few often-used rules:

The Rules	Total Slides	Time	Lines on a Single Slide	Words on a Single Line	Font Size	Other
The 10-20-30 Rule	Maximum of 10	Maximum of 20-minutes	-	-	Minimum 30 pt. font	-
The 5-5-5 Rule	-	-	Maximum of 5 bullets or lines	Maximum of 5 words	-	Maximum of 5 slides in a row applying the first two rules
The 7x7 Rule	-	-	Maximum of 7 bullets or lines	Maximum of 7 words	-	-
The 4x4 Rule	-	-	Maximum of 4 bullets or lines	Maximum of 4 words	-	One thought per line; Don't write in complete sentences
The 2-4-8 Rule	-	Up to 2-minutes per slide	Maximum of 4 bullets or lines	Maximum of 8 words	-	-

Most of the above rules are aligned with available research* to help increase the impact and effectiveness of slide decks rather than detract from them. People are more likely to process and retain large amounts of data by dividing the information into more digestible, smaller bite-sized chunks of data. This is known as “chunking”.

According to the American Psychological Association (APA), “Effective communication between humans depends on sorting information into units that do not exceed the mind’s capacity to chunk them (the chunking limit). This has implications for the content and layout of written documents, diagrams and visual aids, websites, and so on. For example, any list of more than nine bullet points should normally be subdivided into two or more shorter lists.”

Generally, how much could be remembered depends on the size of each chunk and the components within each chunk. Based on the APA’s definition, to help your audience even more effectively retain information you share, depending on the complexity, which of the above rules might be doable for your presentation outline and what could you reasonably accommodate?

For the CAP’s Presenters Program, the rule of thumb has been to keep individual slides simple*, but not make them simplistic. Include:

1. one idea per slide
2. limit the number of bullet points or lines to no more than five bullet points or lines per slide
3. limit the number of words to no more than six words per bullet point or line
4. less words are better, and white space helps your audience to focus on what you’re saying rather than reading ahead

Whichever rule you decide to use, remember to string together individual slides to mirror your outline to help tell the larger story and meet your presentation goal(s). If your goal is to create a standalone documentation, consider creating a separate Word document instead of a presentation slide deck.

USE A DESIGN THEME AND BE CONSISTENT

Slide decks are visual guides to support you—the presenter—as you walk through your presentation. It should complement your presentation and lend visual cues to who you are, your expertise, and the organization you represent.

Always consider who you might be representing for your presentation, and who your audience is.

If you are representing the CAP and developing a slide deck for your presentation, preset presentation templates with a branded design theme are available for download to make it easier for you. Design themes generally incorporate a preset primary color palette (see page 7) and default fonts (see page 8) in its templates. Templates are typically designed to offer a visual hierarchy to help presenters more easily:

- prioritize elements by importance
- identify the most important message for the audience

If you are representing your academic institution or hospital system, or presenting to a large-scale educational meeting, those organizations likely offer their own pre-approved presentation templates with branded design themes, color palette and font(s).

If you are representing yourself, and are not affiliated with an organization, you may need to develop a presentation template from scratch. If so, consider developing a preset design theme template for yourself to:

- ensure design consistency
- minimize having to manually manipulate individual components on each slide in the deck

CONSIDER VISUAL HIERARCHY

How elements are arranged on a slide implies its importance*. The primary message should be reflected as the most dominant visual component on each slide. What is the most important message on the slide for your audience? Is it obvious or will elements need to be moved higher or lower on the visual hierarchy?

Determine the content that needs to be on the slide versus what could be shared verbally with the audience.

The design theme should help grab the attention of the audience, build anticipation for what's to come, and share a call-to-action.

HEADLINE

IMPORTANT DETAILS

OTHER RELATED INFORMATION, AS NEEDED

EXAMPLE OF NO VISUAL HIEARCHY

- **Topic titles, subtitles, and slide content 40 pt.**
- **Use this slide format for body content.**
- **Use Arial 30+ pt bold.**
- **Make bulleted list grammatically parallel.**

EXAMPLE OF VISUAL HIEARCHY

Topic titles, subtitles, and slide content 40 pt.

Use this slide format for body content.

Use Arial 30+ pt bold.

Make bulleted list grammatically parallel.

UTILIZE COLORS STRATEGICALLY

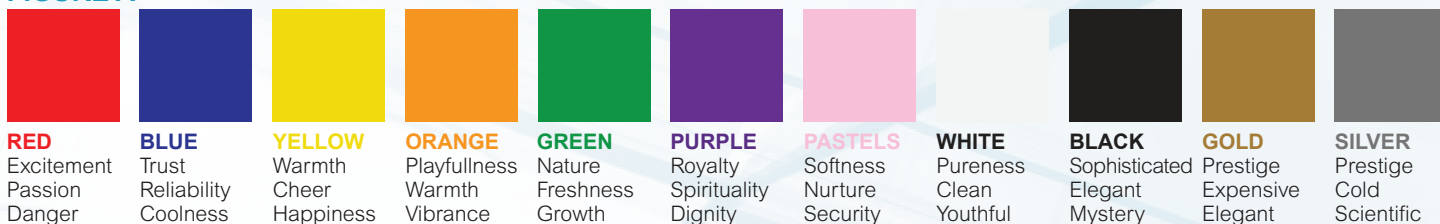
Colors typically evoke feelings and emotions. According to color psychology, the right color combinations can help persuade and motivate while others can potentially distract, demotivate, or impede.

What message are you trying to convey? How will you know which color combinations to use?

Think about some of your favorite brands. What are their color schemes?

Figure A below provides a summary of some colors and the emotions they often evoke*.

FIGURE A



Think back to some of your favorite brands' color schemes. How do you typically feel after you've used their service or purchased one of their products? Do your emotions align with the brands' colors?

CAP presentation templates are preset with the CAP's color schemes aligned with brand guidelines (ie, the blue headers and subheads to highlight the dark gray copy). The proportion of the CAP brand's recommended color usage distribution is shown in Figure B.

FIGURE B

PRIMARY COLOR PALETTE AND USAGE DISTRIBUTION



SECONDARY COLOR PALETTE AND USAGE DISTRIBUTION

These colors are for use in any applications that require more than four colors for execution.



As you may notice in Figure C, the intent is to create contrast for emphasis, but not detract. Usage of white space on the slide can help your audience focus on the core message.

Incorporating color contrasts can be helpful for audience members who might have low vision or a color vision deficiency.*

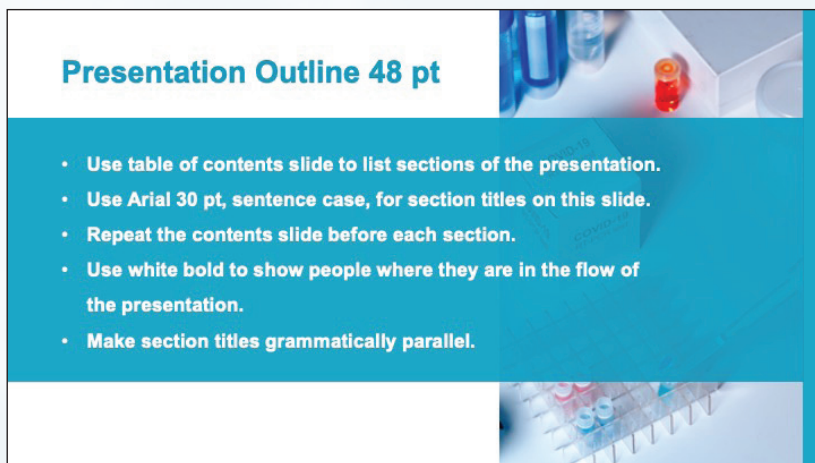
Also, consider usage of corresponding shapes in addition to colors. For example, use a green-colored thumbs up, upward arrow or check mark symbol to represent positive outcomes, and a red-colored thumbs down, downward arrow or "x" to represent negative outcomes.

CONSIDER COLOR PSYCHOLOGY

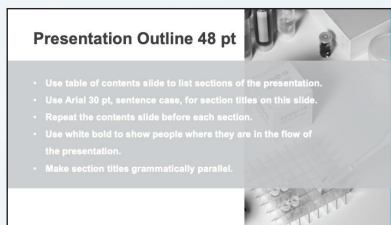
As you work on presentations, part of the homework is learning about who your audience is. While Figure A might be a good reference for those presenting to domestic, US-based audiences, consider the color psychology of other countries/ cultures. For example, in some Asian cultures (eg, China, Japan and Korea), while red might be a prosperous color, writing people's names in red ink means you wish them death. While the color white might be considered pure, clean, and youthful in the US, in some cultures, white is a funeral color.

FIGURE C

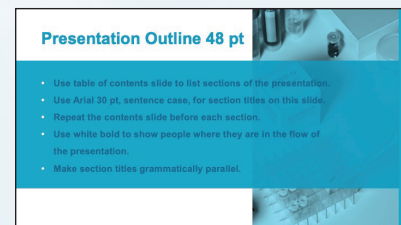
SLIDE WITH RECOMMENDED COLOR USAGE



SLIDE WITH TOO MUCH GRAY



SLIDE WITH TOO MUCH BLUE



CHOOSE FONTS WISELY

Similar to colors, fonts also could evoke feelings and emotions. Fonts could boost positive responses by up to 13 percent* or even create a visceral, adverse reaction. What would you want your audience to feel or think?

CAP slide deck templates have built-in typography options—Arial regular and bold—that are available as standard fonts on most personal computers.

Consider using no more than three different font sizes on each slide/in the overall slide deck. For example:

- 40-point bold font for the slide titles
- 30-point bold font for the text
- 18-point regular font for sub bullets or fine print

While good font usage can support a presentation, bad or too many fonts on a slide can be distractions. See below for examples.

NO FONT VARIATION

Topic titles, subtitles, and slide content 40 pt.

- Use this slide format for body content.
- Use Arial 30 pt bold.
- Make bulleted list grammatically parallel.

RECOMMENDED FONT VARIATION

Topic titles, subtitles, and slide content 40 pt.

- Use this slide format for body content.
- Use Arial 30 pt bold.
 - Make bulleted list grammatically parallel.

TOO MUCH FONT VARIATION

Topic titles, subtitles, and slide content 40 pt.

Subtitles in a different font

- Use this slide format for body content.
- Use Arial 30 pt bold.
 - Make bulleted list grammatically parallel.

CONSIDER FONTS CHOICES

There are several different families of font type. Below are some commonly available fonts on standard computers:

Font Families	Visual Characteristics	Fonts	Associated Emotions
Serif	ABC abc ABC abc ABC abc	EB Garamond, Baskerville, Merriweather, Bodoni Moda, Times Roman	tradition, respect, trust, reliable, formal, classic
Sans Serif	ABC abc ABC abc ABC abc	Merriweather Sans, Abadi, Open Sans, Oswald, Roboto Slab	modern, clean, universal, open, informal, progressive
Script	<i>ABC abc</i> <i>ABC abc</i> <i>ABC abc</i>	Brush Script, Edwardian Script, Freestyle Script, Vivaldi	elegance, affectionate, creativity, personal, feminine, fancy

Consider your font choice(s) and do not use more than two different fonts or more than three font sizes in a slide deck or on a single slide.

For virtual presentations, the audience's screen will be significantly smaller than if they were sitting in a conference room with oversized screens. Even 30-point fonts on a slide may appear significantly smaller on a tablet or mobile device screen.

For consistency, determine the fonts and font sizes for the slide title, slide text, and captions or labels, and incorporate them into your presentation template.

USE HIGH-QUALITY GRAPHICS

As the presenter, you are like the lead actor in a movie. Your background or supporting cast—in this case, the presentation slide deck—should complement rather than detract from your performance. Improve presentations visually with subtle details to create impact rather than to overwhelm.

Consider using photography, icons and charts on a slide if it:

- makes it easier for your audience to understand what you are explaining
- summarizes information
- clarifies a concept through examples
- creates greater emotional impact
- emphasizes what you're saying
- makes your point that much more memorable
- enhances your credibility
- engages the audience

Always:

- use high-quality professional stock images
- avoid using unprofessional images or clip art that do not align with the design theme or organizational brand guidelines
- translate data into appropriate charts, bar graphs or diagrams

NOTE: If utilizing charts and graphs, determine how much detail to show. Consider whether those details will enhance, distract, or become an eyechart to the audience.

DESIGN SLIDES WITHOUT HAVING TO BECOME A GRAPHIC DESIGNER

Not everyone needs to learn how to become a graphic designer to develop visually compelling slides. If the standard or preset CAP presentation templates do not meet what you'd like to visually achieve, below are some available online resources:

Resource		Laboratory-related Direct URLs
Stock Images	Pexels	pexels.com/search/laboratory/
	Pixabay	pixabay.com/images/search/medical%20laboratory/?manual_search=1
	Unsplash	unsplash.com/s/photos/medical-laboratory
Graphic Design	Canva	canva.com/templates/?query=presentations

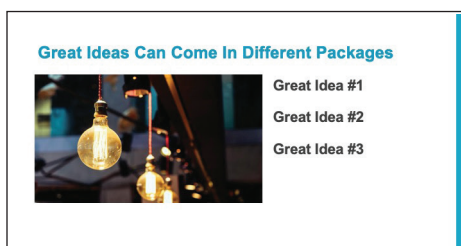
NOTE: These resources offer free, limited accounts. A paid subscription may be required for access to a greater variety of images and templates.

ADJUST GRAPHICS WITHOUT GRAPHIC DESIGN SOFTWARE

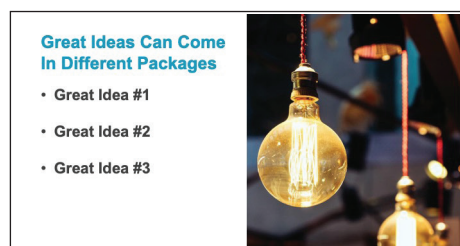
If you have identified a great image for your presentation, but it doesn't quite meet the need, a simple way to adjust the graphic includes altering the image to focus on a specific element by cropping/zooming in on the image or blurring the background.

If you don't have access to graphic design software, try this in your presentation development platform of choice:

SLIDE WITH UNCROPPED PHOTO



SLIDE WITH CROPPED PHOTO



SLIDE WITH BLURRED BACKGROUND



Do you need a slightly more advanced graphic? Online platforms like Canva offer some graphic design capabilities. A paid subscription may be required for access to a greater variety of images and templates.

USE MULTIMEDIA

Presenters can have great success in sharing stories to help engage the audience or illustrate a point. But we also know that there are instances where high-quality pictures are worth a thousand words and can enhance a presentation.

When neither words nor images can do a story justice, sometimes usage of high-quality and relevant multimedia, like video or audio, might be more appropriate to engage the audience, change the pace of the presentation, and enhance the audience's understanding of the content.

To determine whether incorporating multimedia would be appropriate for your presentation, consider the following:

- relevance of content to the presentation
- will it require additional context to establish understanding
- whether you might need to prime the audience on what to look or listen for
- play only what's needed
- do not let your multimedia content automatically play

If delivering your presentation in a location different than your standard work environment, regardless of whether you will have internet access on-site or not:

- export all associated files (including multimedia files) in your presentation by packaging the presentation and transferring all files to a flash drive and/or a cloud-based drive
- export your slide deck as an animation-free PDF file, as a backup

The three most common presentation software allows export of slide decks as PDFs. For specific instructions, please go to the following user guides to search for the most up-to-date instructions:

- Microsoft Powerpoint - <https://support.microsoft.com/en-us/powerpoint>
- Apple Keynote - <https://support.apple.com/guide/keynote/welcome/mac>
- Google Slides - <https://support.google.com/>

Will you be able to utilize your own laptop, or will you need to send the final presentation deck to the meeting planner(s)? If the latter, will the meeting planners also have access to the presentation software you'll need?

If delivering your presentation on a different device than your personal computer, ensure that device is compatible with your slide deck (eg, Microsoft PowerPoint, Apple Keynote, Google Slides) or other presentation app integrations like PollEverywhere, etc.



AUDIENCE ENGAGEMENT TECHNIQUES

As you shape the presentation outline, it's important to continue to keep the audience in mind and meet them where they are. What's their level of understanding on this topic? Based on what you know about the audience, how much breadth or depth will you need to provide?

USE POLLS TO ENGAGE YOUR AUDIENCE

Some of the most engaging presentations incorporate activities where the audience are actively contributing to the conversation in real time. Depending on the total length of the presentation, consider going no more than 10-minutes or so with a check-in to potentially address what questions the audience might have.

An effective way to engage the audience is to ask them questions.

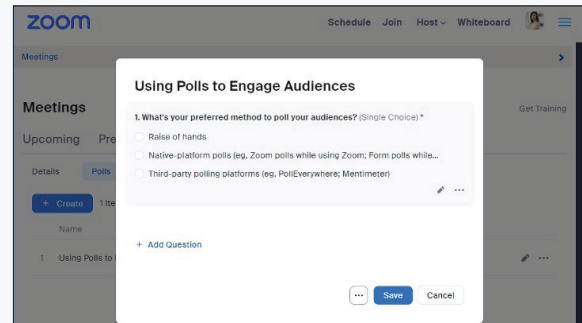
Tools like polls enable the audience to feel even more engaged, and more likely to participate in your presentation.

Polling can range from a simple raise of hands, utilizing the meeting platform's polling functionality, if available, or integrating third-party apps like PollEverywhere or Mentimeter.

SHOW OF HANDS



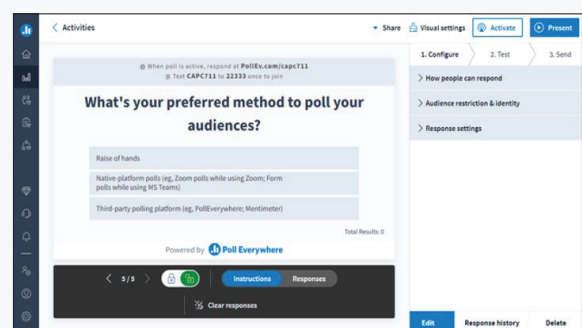
ZOOM



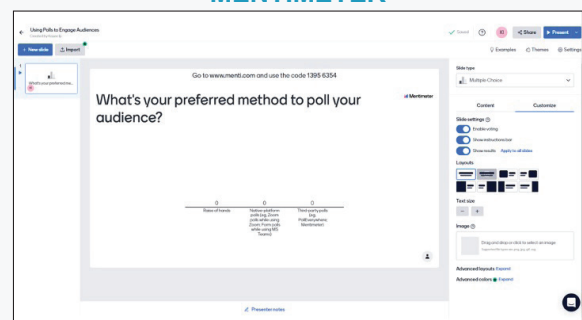
MICROSOFT TEAMS



POLLEVERYWHERE



MENTIMETER



NOTE: Third-party apps like PollEverywhere or Mentimeter offer free accounts; however, a paid subscription is required for access to more robust and advanced functionality.

SPEAKING TO AN INTERNATIONAL AUDIENCE

If presenting to a non-U.S. based, international audience, what is your proficiency in speaking the local language? Or what is the audience's comprehension level for the English language?

Do consider:

- incorporating cultural competency—the “sensitivity to cross-cultural differences and the ability to adapt to other cultural environments” —to ensure you could be an even more successful presenter and likelier to influence your international audience.
- learning from your local contact what some of the biggest faux pas might be to avoid.
- adapting your presentation style so that it might resonate more with your audience (eg, collectivist or individualistic, culture) which could allow you to be an even more influential presenter.
- avoiding idioms, colloquialisms, sports and war-related metaphors, or popular culture references to minimize potential miscommunication.
- incorporating visual aids to enhance understanding.
- distributing handouts with translations of the presentation content, and not simply the slide printouts, if possible.
- utilizing resources available to you to benefit your audience, if needed.

NOTE: To help increase comprehension for audience members with English as a second language, while presenting in Microsoft PowerPoint's “slideshow” mode, consider utilizing the “toggle subtitles” button on the moderator screen to turn on live subtitles of your audio.

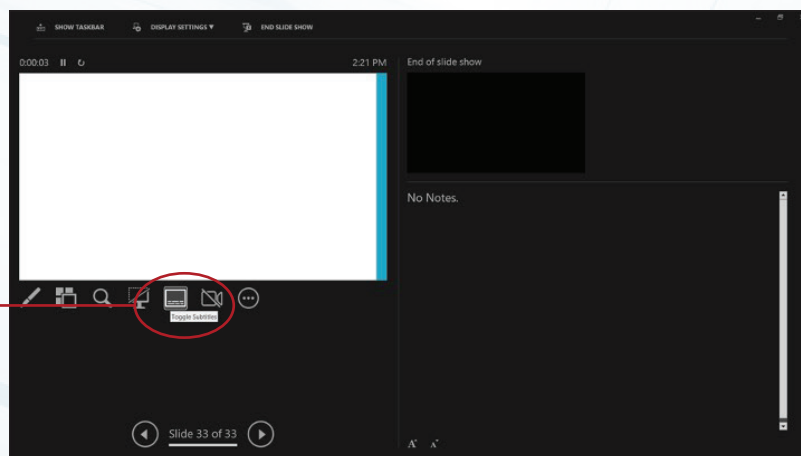
CULTURAL COMPETENCY



COLLECTIVISM VS. INDIVIDUALISM



INCORPORATING PRESENTATION SUBTITLES



Toggle Subtitles

MINIMIZE DISTRACTIONS IN YOUR SLIDES

Make the content easy to digest and visually appealing for your audience while telling a compelling story. Avoid cognitive overload by keeping the slide deck simple.

KEEP SLIDES SIMPLE

If there is more than one concept or focus on a slide, consider breaking the slide into smaller chunks or segments across multiple slides, if needed, and ensure they flow together.

Avoid placing paragraphs of text into slides. If the audience is given an option to read what is on the screen or listen to the presenter, the audience is more likely to read at their own pace and tune out the presenter.

If slide decks are visual guides to support the presenter, too much text on a slide competes with your presentation and can become a distraction. Sometimes, it can be challenging to decide what needs to be included on the slide versus what you should just verbally say. If you are reinforcing specific points, then it might make sense to show certain keywords on a slide.

Avoid using transitions and animation between slides if any at all. Do not use dissolves, spins or other transitions without purpose. In virtual presentations, transitions and animation between slides may not appear as smooth as intended due to variables like each audience member's internet bandwidth or screen resolution.

SORT YOUR SLIDES

Whichever presentation development rule you decide is best for you to use, the individual slides to be strung together should mirror the outline you drafted to help tell the larger story and meet your presentation goal(s).

Does the slide order seem to flow logically? If it does not, consider reordering the slide or revising the presentation content where it makes most sense to do so.



GET READY FOR THE BIG (PRESENTATION) DAY

As you develop your slide deck, and plan for the big presentation day, consider referencing the following checklist to help better ensure success:

PRESENTATION SLIDE DECK DEVELOPMENT BEST PRACTICES CHECKLIST

Timeframe	Best Practice
Three to Six Months Out	<p>Draft a Presentation Outline Research your audience and their understanding on the topic. Lean on the meeting organizer for background on the audience.</p>
	<p>Shape and Refine the Presentation Flow: As you build out your presentation, does the outline still make sense? Do the slides complement your presentation or will they be a distraction?</p>
Two Weeks to Three Months Out	<p>Practice Out Loud</p>
	<p>Practice with Intention: Pick one or two specific presentation delivery skills to work on (eg, verbal pacing, eye contact).</p>
	<p>Practice with Simulation: Rehearse in the same environment (eg, location, time of time, platform) as you would presentation day.</p>
	<p>Understand the Meeting Logistics, and Your Role Will you be able to advance your presentation at your own pacing or will someone else need to advance your slide deck on your behalf? Will you have a helper to moderate the Q&A from the virtual audience? Is the meeting platform you're already comfortable using or will you need to develop familiarity with the functionalities? In case of technology issues, do you have an agreed upon alternative plan in place with the meeting planners?</p>
The Day Before (or the Morning Of)	<p>Test the Technology Give yourself time to pivot if:</p> <ul style="list-style-type: none"> • your internet connection is unstable • you can't screen share • your device needs to be rebooted
	<ul style="list-style-type: none"> • your device is low on battery • the presentation font size is legible by the audience • the day-of computer equipment is compatible with presentation animations or third-party app integrations, if any
Presentation Day	<p>Check the Environmentals Give yourself time to pivot if:</p> <ul style="list-style-type: none"> • your location is too noisy • the background in your location could be too distracting
	<p>Health: Eat, hydrate and sleep and prepare for your virtual presentation day as you would for an in-person engagement.</p> <p>Time Management and Live Editing, If Needed</p> <ul style="list-style-type: none"> • Watch your timing, both while speaking and going through your slides. Don't speed through the presentation, but also don't go over the allotted time. Always consider leaving a few minutes near the presentation end for audience questions. • If you've followed the above rehearsal recommendations and need to quickly edit your presentation live, do so by "jumping" to the essential sections. Prior to presentation day, during rehearsals, in "normal" or "slide sorter" view, note the numbers automatically assigned to each slide and, in particular, the numbers for the first slide in each essential section. While in "presentation" or "slide show" mode, type in your keyboard the number of the slide you need to "jump" to and hit the "enter" key to quickly edit during a live presentation. <p>Breathing Exercises Developing anxiety before delivering a presentation is normal. Most presenters get nervous. Even if knowing the content from front to back still makes your heart race before giving a presentation, try this "box breathing" exercise to help slow down your breath and, subsequently, your heart rate:</p> <ol style="list-style-type: none"> 1. Take a breath, and inhale as much as you can for a count of four seconds. 2. Hold your breath for four seconds. 3. Exhale as much of your breath for four seconds. 4. Hold your breath for four seconds. 5. Repeat these four steps a few more times.

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