As toxicologists with decades of combined experience in toxicology professional practice, ACT Council members have attended hundreds of talks and delivered an equally large number of presentations. Over the years, Council members have also gathered feedback from your peer audience on optimal quality of scientific presentations. We’ve realized it is imperative to perform your best every time you present—whether in a Scientific Session at the Annual Meeting, an educational course, or a webinar.

Much research has been performed on audience preference for learning through hearing, seeing, and storing information during a slide presentation. Learnings from this research can be useful when designing slides and preparing to deliver scientific information. A key learning from this research is that a presentation should be designed to optimize audience comprehension of form, color, size, space between objects, and their movement. For presenters, this translates to the importance of intentional choices of font size and color, the relationship between images and text on the screen, and the motion path of text animation and slide transitions, as well as any hand gestures, facial expressions, or conference hall demonstrations made during the presentation. Giving the audience an optimal amount of information across auditory and visuo-spatial domains will help their collective brains coordinate the sensory inputs, organize the information, store it into working memory, and integrate it with long-term memory.

The star of the presentation is not your slides—it is YOU! Presentation slides should not be used as a crutch; instead, they should be used as a reference for the speakers, who should engage their audience both verbally and emotionally. In a good presentation, the audience focuses on the presenters and the information they are conveying—not on their slides. Your preparation and organization will help the ACT audience understand your main points and help to foster effective dissemination of scientific information.

**Using Templates**
To promote consistency, for example, ACT develops a slide template for the Annual Meeting, courses, and webinars. Using the meeting slide template is mandatory for Continuing Education course presenters (with the exception of government agencies) and strongly encouraged for Symposia, Mini-Symposia, and Workshop presenters.

**Planning the Content**
- Start with a presentation outline, and keep the content focused on delivering the objective you set out to meet in your presentation abstract; the presentation abstract is your verbal contract with the audience and course registrants.
Guidance
Slide Preparation for ACT Presentations

- Clarify from the beginning what information you’ll cover and in what order it will be presented. What are the most important points you want your audience to take away from your presentation? The best presentations are focused, effectively paced, and on time. To achieve this, carefully refine your presentation’s story arc. Maintaining this focus will empower your audience and will potently reinforce your main point. When speaking to experts in your subspecialty, focus less on background and more on data.
- If there are multiple speakers in a session, coordinate your presentation content to minimize redundancy of material among speakers. This is especially true for background information.
- Provide examples to which the audience could easily relate. Presentations with case examples or data always rank higher than those without. Limit animation. If animation is necessary, use the same type of animation throughout. Limit company logos to the first slide, if at all present.

Deciding on the Number of Slides
There is no hard-and-fast rule about the number of slides in your presentation, but each presenter will be allowed only a certain amount of time to give their presentation. The general guide is to set your pace to deliver one slide per minute. Allow at least one minute for slides containing tables or figures, while knowing that some slides will take only a brief moment for audience members to digest. Plan fewer slides per minute if the format of the presentation includes audience questions along the way. Each presentation (and presenter) is different, so the best approach will depend on the material you are presenting and how effectively you engage the audience during your presentation. Don’t forget to include time for a brief Q&A session at the end of your presentation! A “dry run” practice session will help ensure that your presentation will not run too short or too long.

Making Choices Related to Graphics
Leverage the working memory of your audience by dividing the information between the visual and auditory modalities. Visuals can help clarify methods and timelines. Simplify visuals by presenting only the most important data points. Distill bar graphs into the important pieces and remove elements not relevant to the story arc.

Permissions Needed for Copyrighted Material
Ensure that neither the presentation nor the materials (1) infringe the copyright, trademark, privacy, proprietary, or personal rights of any third party; (2) contain any defamatory material; or (3) are otherwise unlawful. Ensure that you have obtained all necessary permissions or licenses from any individuals or organizations whose material is included or used in the presentation and the materials.
Additional Tips on the Use of Graphics and Animations

- Graphs communicate ideas more quickly than tables.
- Photographs may also be effective, but avoid pictures of animals.
- If you must use a table, include only the pertinent details—not a full table, as would be published in an article.
- When using graphics, provide appropriate attribution to the owner (e.g., include the name of the scientist who generated the data).
- Remember to mark graphs with units, legends, and labels; mark your photomicrographs with scale bars.
- If you have a particularly graphics-dense slide, try splitting it into two or three separate, easy-to-understand blocks, or better yet, try splitting into multiple slides.
- With build slides with several blocks of animated content, ensure that the final view could be easily printed or converted into PDF without any of the elements blocking each other.
- Limit irrelevant and distracting content (e.g., music, sound effects, animations, background images).
- For emphasis, consider animating data points to guide the eye. However, use animation with caution—keep it simple. Overusing animation can distract your audience and make your presentation look unprofessional. It should be considered only if it is necessary, and it should be confirmed to launch/run on a variety of operating systems (e.g., Mac, PC) before the presentation is finalized.
- For Continuing Education courses, any and all video files must be embedded within a presentation and attached as separate files when given to the Chair. There is no guarantee that internet will be available in the course room.

Considerations for the Choice of Format

Use simple cues to direct the audience to important points or content. Use text size, bolding, italics, and highlighted or shaded text boxes to convey the significance of key ideas in the presentation.

Be consistent in the format of the slides—headings, subtitles, margins, fonts (style, sizes, and colors), line spaces, box dimensions, border choices, white space.

Making Choices Related to Text

- Recommended font colors are provided on the slide template. Experiment with font colors that stand out. Avoid color combinations that do not project well, such as red on blue, red on green, yellow or orange on green, and blue or yellow on white.
• Less is more. Describe information verbally in enough detail that words on your slide are more or less unnecessary. Ask “What can be left out?” See below for specific guidelines for Continuing Education course and classroom-based presentations where copies of the presentation will be provided to the audience/registrants.
• Use consistent fonts and font styles throughout, keeping font changes to minimum; do not overuse ALL CAPS.
• Slide titles and slide headings should be in title case.
• Save italics to highlight thoughts or ideas and for titles of books or journals.
• Font type—ACT template uses Calibri Light for headings and Calibri for text.
• Font size—Larger is better; the audience in the back of the room should be able to easily read each slide. Ensure that the title fits in one or two lines, and do not use all caps. The font should be no smaller than 18 points in size for it to be legible from 100 feet away on an eight-foot screen. Recommended font sizes are as follows:
  • Slide titles: 40 pt
  • 1st text level: 28 pt
  • 2nd text level: 24 pt
  • 3rd text level: 20 pt
  • 4th and 5th text levels: 18 pt
• General guidelines suggest using no more than 10 lines of text per slide and limiting the number of bullets in a slide to five. Keep bullet points brief.
• Aim to limit each sentence to one line. It is difficult for the audience to listen if they are presented a large amount of text at the same time.

Basic Editorial Guidelines
• Using standard abbreviations is desirable (e.g., rbc, kg, mg). An abbreviation should be placed in parentheses after the first appearance of the full word or phrase that it represents.
• Numerals rather than words should be used for all numbers over a single digit (e.g., 10, 500).
• Always use text to describe numbers one through nine and all numbers used to begin a sentence.
• Make sure that all italics, superscripts, subscripts, and any special characters are in place.
• Before the final presentation, review the slides on a PC or a Mac for which it was originally prepared, and ensure the backgrounds, graphics, and linked images appear properly.

Presentations should represent only scientific material and should not contain any marketing of a company, service, or product. The presenter may not engage in product detailing and may not direct participants to a particular exhibit, meeting, or other company-sponsored entity, website, activity, program, etc.
**Special Instructions for Continuing Education Course and Classroom-Based Presentations**

In situations where presentation materials may be made available to course registrants in electronic format, such as Continuing Education (CE) courses or classroom-based courses, please follow the additional instructions below.

- For CE courses, use the ACT slide template issued for that year’s Annual Meeting.
- Remember to use multiple slides to build animation, especially if slides will be converted to PDFs for archives.
- Do not use background colors, as the content will be difficult to read in the electronic book.
- Pay attention to the detail level on the slide. If slides contain too much content, the text may be split to multiple slides in the electronic book production.
- Include movie clips or other multimedia as individual media files in addition to the slide presentation.
- Include a list of references in the presentation.
- When copying charts and graphics with multiple elements, “group” them first before pasting or paste them as pictures to avoid skewing of the image when the presentation is placed in electronic book format.
- Make sure figures, images, charts, and graphs reproduce well by checking their conversion to PDF, gray scale, and photocopy quality.
- For CE and other ACT courses subject to registration fees, registrants will be provided with copies of the presentation materials, so less is not necessarily more. However, detailed information can be included in backup slides, while main speaking points should be included in the body of the presentation.

**Reference:**


**Annual Meeting Slide Template:**

Click here to download the Annual Meeting Slide Template.
Example of a Slide before and after Applying the Slide Presentation Guidelines

Before

After