8 Technical, Scientific, and Business Presentations: Strategies for Success

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Throughout your time in college, you are likely to be asked to develop presentations, either on your own or with project team members.[1] While many students find giving presentations stressful, the more practice you can get the better, because you are likely to have to give one or more presentations in your professional life. For example, if you end up working as a scientific or technical writer, you might have to give a presentation to the project manager about the status of a documentation project you are working on (perhaps some of your colleagues are not submitting their drafts on time, or perhaps you have identified some inconsistencies in writing style that need to be addressed). Or, if you end up working as a training needs analyst in a large technology corporation, you might have to give a presentation to management about employees' training needs, while also outlining some solutions that will help meet those training needs.

As a technical or scientific writer, you will need to be able to prepare different kinds of documents to meet the needs of audiences who have varying needs and goals. Presentations are often extensions of other technical writing 'products,' such as technical reports, product specifications, and user manuals, so you will need to think carefully about the purpose of your presentation and adapt the content, and your approach, accordingly. For example, a technical report about a new vaccine that is written for people in medical fields would need to provide detailed information about the vaccine (the ingredients, possible side effects, and the results of the clinical trials), whereas an oral presentation about that technical report might only summarize the *key* findings from the clinical trials, if the goal was to encourage the general public to get vaccinated. In other words, you need to

provide different levels of detail, and present your content differently, in an oral presentation that is based on a technical report.

This chapter will outline the key phases of presentation development and delivery, and how best to go about them, with reference to theory and practice from the disciplines of technical communication and information design. While the purpose of this chapter is to prepare you for workplace presentations, some of the examples will refer to classroom presentations too, as that is where you will initially develop your presentation skills.

The key phases discussed in this chapter will include:

- Identifying the audience and the purpose of the presentation
- Choosing presentation tools
- Developing the presentation
- Delivering the presentation

These phases are key to developing effective presentations, because they allow you to address the needs of the audience (who they are and what they need to hear/learn), choose appropriate tools to convey the message of the presentation, apply best principles to the design and development of that presentation, and deliver the presentation in an effective way. As a presentation will often accompany other forms of documentation, the other skills you learn throughout this handbook will also help you to fine tune your presentation skills.

Identifying the Audience and the Purpose of the Presentation

In this section, we will consider the following ideas:

- Audience demographics
- Audience interests
- Audience expectations
- The purpose and scope of the presentation

This focus is key, for before you can begin to develop a presentation, you need to find out as much as possible about your target audience. Are you presenting to peers who have similar interests and abilities to you, to your professors, or to workplace colleagues?

If you are giving an update to teammates about the status of a group project, the presentation will likely be informal, as you will just be

addressing the key points that your teammates need to know. If your presentation is for a professor and is credit-bearing, it will need to be more formal, partly because your professor will be evaluating the quality of your presentation and delivery style. Your professor will likely specify topics that you need to address and may even issue a grading rubric to help you plan your presentation. To achieve a high grade for a college presentation, you should ensure you adhere to all the requirements for the presentation and that you address each of the specified topics.

In a workplace setting, where you may be presenting to peers or to senior management, you need to remember that your colleagues might not have the in-depth knowledge that you have about what you do on a daily basis. Consequently, you will need to think carefully about the language you use, the tone you adopt, and the content you cover. In a presentation to management, the audience might only be interested in specific topics. For example, in a software company, management might only want to know whether or not you will complete the software documentation on time and might not be interested in *how* you went about designing that documentation.

Throughout your college and professional life, you might hear people say 'know your audience'—this is because we sometimes forget about our audience and give the presentation *we* would like to hear, rather than the one the audience would like to hear! We will talk more about content, and how best to present it, in a later section of this chapter.

Choosing Presentation Tools

In this section, we will consider the following factors:

- The available software you can use for creating or giving presentations
- Your technical proficiency (skills) with such software
- Whether or not you are using a free trial version of the software
- Output file formats available from different software

Such factors are important, for there are many commercial applications on the market, as well as free-to-download applications that you can use to develop presentations. Most tools offer similar features, including the ability to insert text, images, and other media, and to add special effects such as transitions (e.g., slides that fade in/out) and animations.

Two commonly used tools include Microsoft PowerPoint (commercial) and Google Slides (free-to-use), but there are many others. You might

already have access to one or both of these tools on-campus or on your personal device.[2] In addition, most workplace environments provide employees with access to a suite of tools that will help them undertake their day-to-day duties, so it is likely that a presentation tool will be in this suite.

While there are many elaborate tools out there, you should consider the tools you have used previously (if any) and use one of those, unless you have time to learn new software. You will find lots of helpful 'how to' videos for commonly used tools on YouTube and other websites, so it's best to use one of those if you have never used presentation software before. For example, if you type 'How to insert a YouTube video into Google Slides' or 'How to add effects in PowerPoint' into Google, you will get a large number of results. Tools like Prezi can offer appealing effects, but the format might not work as well in a corporate environment, and besides, you (the presenter) would need to be comfortable using Prezi, so that is another consideration.

If you need to use software that you don't currently have a license for, you may be able to download a free trial version. However, it's important to note that these tend to have time limits (typically 30-60 days) and/ or feature limitations (e.g., you might not have access to the full range of features or there might be limits on the number of presentations you can save). But quite often the free trials will suffice for college presentations, which typically only span a few weeks. For workplace presentations, you should ideally have access to the full version, with no feature limitations, so you will need to check this out with your I.T. department.

> **Useful tip:** Don't install a trial version until you are ready to start working on the presentation and make sure the trial license will remain valid until your deadline.

You need to find out if your target audience (this could be your professor or an employer) has requested specific file formats. Typically, Microsoft PowerPoint presentations have a ppt or pptx filename extension, but sometimes you may be asked for a pdf file, which can be viewed in a Web browser. Fortunately, PowerPoint enables you to export ppt files as pdf files, so that won't be an issue. Google Slides also enables you to save presentations in ppt or pptx formats. If you are giving a live presentation, you should also ensure that the software you have used will work in the presentation venue—I've attended a number of presentations over the years where the presenter did not check this beforehand and was unable to show their presentation slides (also known as a slide deck). We will talk more about technology considerations later in this chapter.

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2 You can read more about Microsoft PowerPoint at https://www.microsoft.com/en-us/ microsoft-365/powerpoint. You can access Google Docs at https://docs.google.com.

Useful tips:

*   Check out the room facilities a few days before your live presentation to make sure you will have access to the software you are using. Ideally, do a trial run beforehand, to ensure your presentation displays as intended. You don't want any surprises on the day!

*   If you cannot access the venue before your live presentation, save your file in a variety of common formats (e.g., ppt and pdf) to give yourself a greater chance of your presentation working as intended.

*   Bring a copy of your presentation with you on a USB (pen) drive but also email yourself a copy in case the USB drive fails to work. Being prepared will also boost your confidence.

Developing the Presentation

In this section, we will consider the following questions:

*   How should you structure technical, scientific, and business presentations?
*   What are the considerations for writing style and tone?
*   How should the information be designed, in terms of text formatting, use of color, and incorporation of tables, charts, and diagrams?
*   What are the advantages and disadvantages of using presentation templates?

Let's look at each of these topics in a bit more detail.

Structuring the Presentation

A presentation typically comprises three sections: an opening, a body, and a closing. In the opening, you should first gain the attention of your audience by providing some context for the presentation you are giving. For example, if you are giving a presentation to your professor about your team's brochure redesign assignment, you might present a screenshot of the finished brochure on the opening slide. In the opening section, you should also outline what the presentation will cover—think of this outline slide as a 'table of contents' for what will follow and present it in bullet points, rather than in paragraph format. The goal of the opening is to capture the attention of the audience and let them know what you are going to address in your presentation.

In the body of your presentation, you present the main message. Continuing with the college brochure assignment as an example, you might dedicate separate slides to discussing why your team picked that brochure, why they redesigned it that way, the challenges the team encountered, and what the team would do differently in future. In a corporate presentation

to management, you might present an update on how the documentation project is progressing, which deadlines have been met, which challenges still remain, and so on. Aim to have a single message on each slide and state it clearly. While bullet points are good for lists, they are not suitable for every message. We will talk more about information design in the next section.

In the closing section, you should wrap up your presentation by summarizing the key points of the presentation. Students sometimes struggle with summaries, as they're not sure which points to repeat and which ones to leave out. Imagine that your audience will only look at the summary—what are the key points (findings) they must take away? What lessons will they learn? What are the next points of action? You also need to make it clear to your audience that you have finished the presentation, to avoid any awkward moments of silence at the end. One way to do this is by closing with the statement 'Thank you for your attention. Have you any questions?' We will talk more about delivery and how to wrap up a live presentation, in a later section.

Writing and Formatting the Presentation

Once you have picked your presentation tool, start laying out your slide deck. Many tools offer templates, which are pre-defined designs that you can customize to your own use. Templates are really useful if you are caught for time, do not have good design skills, or just want to get inspiration. Usually, the templates and design ideas are informed by good practice, so you can be reasonably confident that the type style, sizes, and colors work well together.

> **Useful tip:** Presentation software templates are a great starting point if you are looking for inspiration about colors and typography that work well together. Even if you're not creating a presentation, you can look at the color schemes and layouts that have been built into the templates to get ideas for your other documentation projects.

While templates are always an option, you might prefer to design your own layout; if so, you should keep the following guidelines in mind:

First, carefully consider the type style and size you use on your slides. Sans-serif types (like Verdana, Century Gothic, and Arial) tend to work better for on-screen presentations as they don't have curves at the end of each letter and are therefore more uniform (unlike serif types like Times New Roman and Century Schoolbook) (Schriver 252–256). The subject matter can also influence the type you choose—for example, a sans-serif type like Comic Sans would not be appropriate for a workplace presentation. The type style will also dictate the size of the type—some types look larger than others, so you may need to experiment a little.

Next, avoid using italicized type (except for very small portions of text) as it is difficult to read and avoid using underlining completely (except for hyperlinks) as it distorts the type (Schriver 265–266). Avoid using all uppercase letters as it reduces reading speed and can come across like you are shouting. Also, only use a numbered list when the text order is important (e.g., for a set of procedural steps) and a bulleted list for all other lists.

Finally, limit the amount of text you place on each slide. You may have heard the phrases 'less is more' and 'keep it simple'—well those principles equally apply to presentations. If possible, only include keywords or themes, and talk around them as you address the audience. Try to avoid paragraphs of dense text, as attendees will find them difficult to follow (see Figure 8.1), but if you must use paragraphs, chunk ideas into separate paragraphs. Left-align paragraphs of text.

As discussed earlier, the tone you adopt and the language you use should be informed by the audience you are addressing. If the audience comprises people who might not be experts in your discipline or field, or who may be non-native English speakers, you should avoid using jargon, colloquialisms, clichés, and acronyms.

> **Useful tip:** Plain English is a style of writing that ensures the content is more readily understood by everyone. You can read about the Federal Plain English Guidelines at https://plainlanguage.gov/guidelines/.

In Figure 8.2, note how a table has been used to present essentially the same information as Figure 8.1, but in a more user-friendly way. It is better to use a table to present multiple numerical values as you can present the information in a relatively small space and the audience will find it easier to compare the values (Rubens 336-337). A table will also help you during your presentation as you won't have to remember the data and can elaborate on what the data means, in your own words.

RATIONALE FOR THE TYPOGRAPHY CHOICES

We decided to use blue (hex colour #00A6FF) for the main headings and sub-headings because it matches the logo of the original brochure and it provides good contrast against the white background. The main body text and figure captions were black (hex colour #000000). We used size 30 for the main headings, 24 for the sub-headings, 20 for the main body text, and 16 for figure and table captions.

Figure 8.1: Example of a Poorly Designed Slide

RATIONALE FOR THE TYPOGRAPHY CHOICES

	Type size	Type colour	
Main headings	30	hex #00A6FF	To make this more appealing, you would present this text in blue (#00A6FF) type
Sub-headings	24	hex #00A6FF	
Main body text	20	hex #000000	
Figure and table captions	16	hex #000000	

Figure 8.2: Example of an Improved Slide Design

You can often use figures, diagrams, and charts to explain complex concepts and to appeal to attendees who prefer visuals to text. If you are presenting the results of a survey, for example, you might use a pie chart or bar graph to convey the data, rather than present the figures on their own. If you are presenting a workflow or process, a flowchart can work well.

Every visual should be simple, similar in size and placement, and high quality. Callouts or labels should be legible. Include informative captions for every table, figure, graph, chart, and graphic you incorporate into your slide deck. Text and visuals should complement one another (Schriver 441).

When choosing graphics, try to avoid using clipart (particularly in workplace presentations) as they tend to look unprofessional; instead, look for high quality images. Two sources of possible images include Pexels and Creative Commons.[3] You might occasionally want to incorporate audio or video clips into your presentation. If you do, make sure that they are relatively short clips and that they will add value to your presentation.

Use blank space as a design feature. Fortunately, it doesn't cost any more to add another slide (unlike printing additional pages in a hard copy of a document!) so don't be afraid to spread a topic over multiple slides. It's easier on the eye if there is a healthy blend of text, visuals, and blank space, so be generous with the margins too (top, bottom, left, and right).

You should carefully consider the colors you use in your presentation. If you are giving a classroom presentation, you may have flexibility in the colors you use, or you might find some inspiration in the theme of your presentation. For example, a presentation about a brochure assignment

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3   Pexels can be found at https://www.pexels.com. Creative Commons can be found at https://search.creativecommons.org.

might incorporate similar color schemes to those used in the brochure. In a workplace setting, the corporation might already have pre-determined templates that you must use, which will usually be aligned with other corporate materials. But in the absence of corporate templates, you should use professional looking templates that use *appropriate* type styles and colors.

Useful tip: If a topic needs to span more than one slide, you can use a convention like this for the slide headings, where '1 of 2' means the first slide of 2 on that topic:

- Rationale for the typography choices (1 of 2)
- Rationale for the typography choices (2 of 2)

Regardless of templates and corporate guidelines, you should always ensure that your color choices provide sufficient contrast. Black text on a white background provides maximum contrast, but it can look very stark, so you might like to consider dark shades of grey or navy type on an off-white, cream, or pale-yellow background. You may need to experiment with a number of color combinations to get it 'just right'. You should also bear in mind that some colors have cultural connotations that will deem them inappropriate.

You should also try to make your presentations accessible to as many attendees as possible. Color choices can also cause accessibility issues. According to the Colour Blind Awareness organization, about 300 million people worldwide are color blind. Some colors (including red and green) cannot be perceived by people who have color blindness.

For attendees who are blind, you can provide a text transcript of your content so their screen reading devices can read the text to them. In addition, by providing alternative (alt) text for images, figures, or tables, your attendees will hear what you are trying to convey in the image, figure, or table, as their screen readers will read the alt text to them.

Attendees with dyslexia will benefit greatly from appropriate font choices—sans serif typefaces are preferable to serif typefaces, as they are plain, evenly spaced, and more readable, especially if they are size 12 or larger. Other formatting features that will help readers with dyslexia include left-justified text (the text should be jagged on the right), short paragraphs, 1.5 line spacing, and more visuals to ease the reading load.

Finally, you can help attendees who are hard of hearing by wearing a microphone and speaking clearly and slowly. Attendees who are deaf will benefit from receiving copies of your presentation notes in advance, so they can follow the presentation in text form.

Useful tips:
- This article outlines color and cultural design considerations: https://www.webdesignerdepot.com/2012/06/color-and-cultural-design-considerations/.
- You can read about color blindness on this website: https://www.colour-blindawareness.org/colour-blindness/.
- You can test your own color vision on this website: https://enchroma.com/pages/color-blind-test.
- Many presentation tools can check for common accessibility issues such as missing alt text and poor contrast between foreground and background. Look for 'accessibility' features.
- This website, by the World Wide Web Consortium, offers useful tips for writing, designing, and developing accessible content: https://www.w3.org/WAI/design-develop/.

Delivering the Presentation

In this section, we will consider the following questions:

- What are the most important technology and room facility considerations when delivering a synchronous, in-person presentation?
- Why is it important to do rehearsals before a live presentation?
- What are the different styles of delivery?
- How can presenters plan for interaction?
- How should you use supplementary resources and follow-up with attendees?
- What are the additional considerations when delivering a synchronous, virtual presentation?

These factors are key to giving effective presentations that address many of the items noted in the previous sections of this chapter.

Technology and Room Facility Considerations

As mentioned earlier in the section on choosing tools, you need to make sure that your presentation will run in the presentation room, as not every PC has the same setup as yours. To give you time to sort out any unexpected issues, you should test-run your presentation a few days before the live presentation. You should also ensure that you know how to operate the overhead projector, as some venues use remote controls to operate overhead displays, and they can take a little getting used to.

If you cannot get access to the presentation room a few days beforehand, go to the room early on the day of your presentation to set everything up

and make sure you bring a few versions of your presentation with you, as mentioned earlier (e.g., ppt and pdf).

Ideally, you should also do a sound check before the live event by asking a colleague to stand at the back of the room as you speak—they will be able to tell you if the volume is sufficient or if you need to borrow a microphone. If you decide to use a microphone, make sure you have tested it beforehand and are familiar with it.

If you are comfortable using a pointer device, you might want to consider using one. These devices usually come in two parts—one part plugs into the USB drive and you hold the other in your hand. You can use the pointer to highlight areas on the screen (they usually have a red LED light) and also to progress through your slides—this latter feature is particularly useful if you need to move around the room during your presentation, as you won't have to rush back to the PC to advance the slide deck every time. We will talk more about styles of delivery later in this chapter.

Rehearsing the Presentation

I have been giving presentations at conferences for twenty years, but I still feel nervous beforehand. I even feel nervous before giving a lecture, but I usually know *that* audience, so the nerves tend to dissipate sooner! I find the best way to deal with stage fright is to spend time developing the presentation and practicing it multiple times.

It is important to time your presentation also, to make sure you have enough to say but also that you can cover all the content in the time allocated. On a few occasions, I've been surprised how quickly the time goes by and how my seemingly short presentation is actually quite long once I start talking about the content on each slide. After a few rehearsals, you will have a much better idea of what you can, and what you cannot, cover and you will feel more confident that you will be able to give an effective presentation. If you don't rehearse, you are likely to rush through the presentation and leave out important points.

You should also factor in time for questions at the end. Sometimes, the audience will not have any questions, but it's important to allow some time, just in case. If you are giving a presentation in college, your instructor will likely tell you how long the presentation must be and how much time you must allocate to Q&A. In a workplace setting, you should always allow time for questions, as it's likely that you are trying to convince your audience that your proposal or approach is a good one.

Styles of Delivery

Have you ever attended a presentation where the presenter read their slides from start to finish? Quite often, presenters know they shouldn't do this, but they are either too nervous to address the audience directly or they cannot remember what is on each of the slides (sometimes it is a mixture of both!). If you are going to read the slides out word-for-word, you might as well just distribute the slides to the audience by email, rather than invite them to the presentation venue.

There are many different presentation styles. I like to be very well prepared and use my slide deck to guide the flow of my presentation. Other presenters like to be less structured and adapt their presentation to suit the audience on the day (they might, for example, tell anecdotes to illustrate concepts or ideas). Whichever approach you take should depend on your personal communication style and confidence with the subject matter. I would advise against using an approach that doesn't suit you personally!

If you have practiced extensively, you might feel comfortable delivering the presentation from memory, just referring back to the slides as you progress through the presentation. However, if you feel the need to have notes in your hand, that is perfectly acceptable, provided you don't read them from start to finish. If you find yourself having to consult them regularly, take time to make eye contact with the audience as often as possible.

Useful tips:

- At the start of the presentation, ask the attendees if they can all hear you properly. If some people are having difficulty hearing you but you don't have a microphone, you could invite them to move further up the room if seats are still available; if not, you could present from a mid-point in the room to enable more people to hear you.

- Don't forget to breathe during your presentation. It will make you feel more relaxed and gives you time to gather your thoughts.

- Feel free to take sips of water whenever you need to quench your thirst.

- If you plan to consult your notes during the presentation, make sure the pages are numbered and correctly sequenced, so you can quickly find the page you need when you need it.

- This website presents the eight types of presentation styles: https://blog.hubspot.com/sales/types-of-presentation-styles.

Some presenters like to 'own the room'; in other words, they like to walk around and interact closely with attendees. Other presenters (myself

included) tend to use the podium as their base and move from time-to-time around the top of the room, not venturing too far from the base. Either approach is acceptable once you make sufficient eye contact with attendees. For example, if you are giving attendees an overview of a software application and then want them to try the software themselves, you might walk around the room and offer one-to-one advice. It is perfectly acceptable to adopt different styles during your presentation also.

Planning for Interaction

I mentioned earlier that you should always allow for Q&A at the end of your presentation. Some presenters also like to give attendees the option of asking questions *during* the presentation—if this works for you, I suggest you let the attendees know at the start that you are happy to answer questions at any point during your presentation. If you would prefer attendees to wait until the end, you should also let them know. If you are not very confident giving the presentation, it might suit you better to leave all questions until the end, to avoid distractions. When someone asks a question, it is good practice to repeat the question, as some members of the audience might not have heard it; this strategy also helps you confirm that you have heard it correctly, before you respond.

If you need the audience to undertake some tasks or respond to your questions during the presentation, you need to make sure they have everything they need. If you are planning on distributing handouts, make sure to ask the event organizers how many people are likely to attend (and bring 10-15 spare handouts just in case!) If attendees need to undertake a task at a computer, make sure they all have logins and passwords for that venue and that the software you need is installed on those PCs.

You should also factor in the time required for interactive activities. What might take you five minutes to do might take the audience much longer, so allow extra time for those tasks.

One of the biggest concerns that most presenters face is dealing with a difficult question. Rest assured that every presenter has been faced with difficult questions at one point or another. Over the years, I've learned two things from those experiences: 1) it's ok not to know the answer to every question, and 2) you should admit that you don't know the answer but that you will find out. I find that attendees are usually satisfied once you say you will get back to them afterwards with the answer (but don't forget to do this!). Sometimes, you will remember the answer when your presentation is over, when you are more relaxed, but that's ok too.

Using Supplementary Resources and Following Up

Quite often, presenters like to distribute handouts during or after their presentations. You might, for example, like to distribute a hard copy of your slide deck, so participants can write notes on them during your presentation, or consult them later. As mentioned in the previous section, make sure you ask the event organizer how many people are likely to attend and bring spare copies. If you cannot print out a copy for attendees beforehand, you can offer to circulate them afterwards via email. Circulating them afterwards also enables you to follow up on any outstanding questions that could not be addressed due to time constraints.

> **Useful tips:**
> - Most presentation tools enable you to print your slide deck in different formats e.g., one slide per page or two to six slides per page. While it will save paper if you print a large number of slides per page, you need to ensure that attendees can still read the content on the slides. I usually print two to four slides per page to ensure they are sufficiently legible.
> - If someone else is organizing the presentation, ask them to take an attendee list so you can send the supplementary resources afterwards. If not, have a sheet of paper ready and ask attendees to add their details (names and email addresses) and pass it around, during your presentation.

Synchronous Virtual Presentations

Sometimes, due to travel restrictions or simple convenience, you will be asked to give a virtual presentation (also known as a webinar or videoconference), where you will not meet the attendees physically. While many of the guidelines that apply to face-to-face presentations also apply, there are additional considerations you need to bear in mind for a virtual presentation.

Firstly, you need to find out which software application you are expected to use—examples include Zoom, Google Meet, WebEx, Skype, and Microsoft Teams, but there are many more. If you are lucky, the event organizer will send out a 'meeting invite' by email, which will be addressed to you and all the attendees. On the day of the event, presenters and attendees will click on a link to join the virtual presentation. However, it is important that you try out the software beforehand to ensure it works as intended, as sometimes it is necessary to download an app or create a user account before you can join the presentation. On a related note, you will also need to let attendees know if they need to download anything in advance.

Secondly, like with face-to-face presentations, you should do a trial run with the software, to ensure your voice can be heard, your slide deck can be

uploaded, and that your video works (if you are planning on using a webcam). Most webinar tools offer multiple ways of presenting content (e.g., slides only, slides with the presenter in thumbnail view, or presenter view only) so you will need to familiarize yourself with the various options and settle on one that works for your presentation style.

Thirdly, in terms of interaction, you need to think carefully about how your attendees will ask questions and communicate this to them. Do you want to mute all attendees by default and only unmute an individual if they have a question? Alternatively, will attendees post their questions in the chat area (most webinar tools have a text only area where attendees can converse during the event), will they put up their hand physically (on camera), or will they use the 'hand' icon (most webinar tools have a feature that enables attendees to place a small hand icon beside their name, if they want to ask a question). In my experience, monitoring the chat area and hand icons is really challenging during a live presentation, so I don't recommend it—instead, I recommend you ask a colleague to monitor who wants to ask a question and the order in which they asked them, so you can address the questions in the correct order at the end. However, if no one is available to help you, you can ask attendees to refrain from posting or asking questions until the end and then work through them one by one. And don't forget that you may need to unmute attendees if they cannot do it at their end!

Fourthly, you should also decide in advance if you want attendees to turn on their cameras or leave them off. If there are bandwidth issues, you might need to ask attendees to leave their cameras off until question time; however, the downside to this is that you may feel like there is no one in the audience, as you will not see their faces—you will likely only see thumbnail photos (if you are fortunate) or the initials of each attendee (if you are less fortunate). This kind of presentation environment takes some getting used to but rest assured that you will become more used to it in time.

Finally, common issues that presenters run into during virtual presentations include faulty microphones and webcams, so make sure yours are working and try to have backup equipment if possible. You also need to familiarize yourself with the mute/unmute feature, as sometimes presenters start speaking but the audience cannot hear them (note that you might have a mute button on your microphone as well as in the presentation tool itself). Presenters also sometimes have issues sharing their slide decks with attendees, so make sure you are comfortable sharing and un-sharing files.

Useful tips:

- Do a few trial runs of the presentation software with a colleague, to familiarize yourself with how the tool works. Delivering a presentation online can be daunting, and it can feel as though there is no one present if the cameras are off, so you need to be comfortable.

- Make sure you are familiar with the mute/unmute features.

- At the start of the presentation, ask the attendees if they can hear and see you. Also ask them if they can see your slide deck once you share it with the audience. If their cameras are off, they might answer via the chat area, so keep an eye on chat too.

- Have your slide deck open in the background and close any unnecessary windows and folders just in case you accidentally share a screen you don't intend on sharing. This happens to nearly everyone at some stage, and it can be embarrassing if you are not prepared for it.

- Put your cell phone on mute and place a 'do not disturb' sign on your door, so no one disturbs you during your presentation.

- Communicate clearly with attendees about the strategy for asking questions. If you'd prefer them to post questions in chat only and/or to hold all questions until the end, then state that clearly at the beginning of your presentation.

- If you cannot mute all attendees before they join, then ask them to mute at the start of the presentation. It can be very distracting when attendees unmute their microphones (sometimes accidentally) while you are presenting, so you need to be ready to deal with it.

Conclusion

In this chapter, we examined the key phases of presentation delivery and outlined how you might go about them in practical ways. We outlined how technical and scientific presentations are often extensions of other types of technical writing products but often have a different audience and goal. While presentations provide a different level of detail than the documents from which they originate, they must still mirror the original document. Furthermore, many of the design principles and guidelines that apply to other types of technical documents also apply to presentations.

The appendix presents a checklist that addresses the main areas you might like to consider when designing and developing your own presentations.

Works Cited

Rubens, Philip. Ed. *Science and Technical Writing*. Henry Holt and Company, 1992.

Schriver, Karen A. *Dynamics in Document Design*. John Wiley & Sons, 1997.

Teacher Resources

Overview and Teaching Strategies

While presentation skills are typically taught in later technical writing classes, once students have learned the foundation of technical writing and have developed their confidence as higher education students, they can be taught in an introductory class.

Ideally, students will have studied introductory topics such as writing style, tone, and layout and prepared other types of written documents before. It is also helpful if students have learned a bit about the profession, in terms of the kinds of duties and tasks that technical writers typically perform and how they might have to produce any kind of content for a technical or scientific organization.

One of the key messages from this chapter is that a presentation is often an extension of another technical writing product and that students need to think carefully about the audience and the goal(s) of the presentation, to ensure the content is tailored to that audience and meets the intended goals. This chapter highlights all the essential steps that students need to follow when planning, designing, and delivering a presentation, with reference to practices that are also important in other types of content development projects.

If presentation skills are to be taught in an introductory course, instructors may wish to reference this essay in the latter half of the course and ask students to develop a presentation that showcases how they approached an earlier assignment (e.g., how they approached a brochure or user manual assignment). In doing so, students will not only develop their presentation skills, they will also have a tangible goal for the presentation. The appendix provides a checklist that students can use when designing, developing, and delivering their own presentations.

Discussion Questions

To engage your students with the ideas discussed in this chapter, consider having them address—individually, in small groups, or as an overall class—the following questions:

1. Thinking back to presentations (including classes) you've attended in the past, which presentations stood out as being effective (or ineffective)? Why do you think they were effective (ineffective)?
2. How do you think a presentation to a live, in-person audience would need to differ from a technical report about the same topic? Elaborate on your answer.

3. Which writing and formatting considerations apply to both written documents and oral presentations?
4. What kind of accessibility issues might you encounter when giving a presentation, assuming a mixed audience? Can you think of any practical ways to minimize those issues?
5. Given the various presentation and interaction styles presented in this chapter, which style(s) would you choose to adopt, and why?
6. What kinds of technology and room issues might you need to consider when planning your presentation? How might you prepare for, and deal with, unexpected glitches?

APPENDIX. CHECKLIST FOR PRESENTATIONS

Phase	Practical considerations	Tick when completed/ considered
Identify the audience and the purpose of the presentation	• Have you identified the purpose and scope of the presentation?	
	• Have you identified the audience profile (e.g., their demographics, motivation, interests, and expectations)?	
Choose presentation tools	• What presentation software (if any) is currently available to you?	
	• What software (if any) do you feel comfortable using?	
	• Would a free trial version suffice?	
	• Which file format(s) do you need to provide?	
Develop the presentation	• Are you going to design your own slide deck or are you required to use a corporate template for your presentation? If so, are there restrictions on the type, color, and graphics that you can use?	
	• Have you taken cultural considerations into account when planning your color scheme?	
	• Have you catered for different accessibility issues when developing the presentation?	

Phase	Practical considerations	Tick when completed/ considered
	• Does your presentation have opening, body, and closing sections? Have you clearly stated the purpose and structure of the presentation in the opening section? Have you summarized the key points of the presentation at the end?	
	• Is the writing style and tone suitable for the target audience? Have you explained any complex jargon if your audience is not familiar with it? Have you adhered to Plain English guidelines?	
	• Have you used tables, charts, diagrams, and/or figures instead of text, when they are required?	
Deliver the presentation	• Have you checked the facilities in the room where you will deliver your presentation? Does your presentation display as intended?	
	• Have you rehearsed your presentation?	
	• Have you identified your preferred presentation style (e.g., formal or informal)?	
	• Do you plan to have handouts (e.g., printouts of your slide deck) and have you printed enough copies in advance?	
	• Have you considered the requirements for any activities that attendees might undertake during your presentation?	
	• If you plan to follow-up with attendees afterwards, have you prepared an attendance list for participants to sign?	
	• If you were unable to answer one or more questions during your presentation, have you followed up with the relevant attendees?	

Phase	Practical considerations	Tick when completed/ considered
	• If you are delivering a virtual presentation, have you familiarized yourself with the software so that you know how to mute/unmute attendees and share/un-share files?	
	• If you are delivering a virtual presentation, have you devised a workable strategy for interaction during the presentation (e.g., should attendees ask questions in live chat only or by putting their hands up)?	