

PowerPoint Made Easy(er)

November 2016

Lecture Notes

Slide 5—A Reminder:

- Do you need PowerPoint?
- Remember that it is merely one tool for you to use to help educate your learners.
- It is NOT applicable in every situation and can actually make some educational efforts more difficult.
 - We often see some concepts “forced” into that framework because it is all we know how to do.
- Consider:
 - Who (the audience). Is this lecture going to be effective for this group of learners.
 - What (the topic). Is this topic appropriate for both my learners and the amount of time I have.
 - Anecdote about being asked to give a lecture of Electrolyte Emergencies in Pediatric Critical Care. *In one hour!* (it is often an entire day’s curriculum at Society of Critical Care meetings)
 - Where (the environment). Will your lecture be in a large auditorium or small classroom.
 - When (timing). Time of day or level of training/time of year. Important for knowing potential for agitation (before lunch, break or end of day) and sleepiness (after lunch), as well as to knowledge base and experience.
 - Example: giving a lecture on asthma to Interns in July versus June.
 - Why (the objective). What is/are the main point(s) of this educational experience? Do we need PowerPoint, or is there a better way to teach the concept(s)?
 - How (the means). What equipment will you have access to? Are there Macs or PCs? Do the speakers work? Do they have a laser pointer? Do you have special equipment needs?
 - Anecdote: I was invited to give a lecture on the practical applications of OMM in pediatric sports medicine. I was told the focus would be on hands-on techniques and getting the participants to be comfortable utilizing multiple diagnostic and therapeutic applications with demonstrations and practice. When I arrived, the lecture was in a small room with no treatment tables at all and only a computer....no projector.

Slide 6—Organization:

- Once you have decided that the PowerPoint model is right for your objectives, audience and venue, you should consider the principles discussed in TOT 1 for the 4-Step Model of Effective Presentations for Small Group Learning Experiences.
- [NOTE: this lecture was a past TOT presentation that I have now included on this Padlet with lecture notes for your perusal.]

Slide 7—Where to start?

- So now you can just sit down and quickly write a PowerPoint lecture...right?
- Probably not...there should be some madness to your method. You can feel free to use whatever works well for you, but let me at least discuss one option with you.
- You could build your presentation the same way you might write a bestselling series of novels. [CLICK]
 - Anecdote about how JK Rowling sketched out her characters and then started with the last chapter of her last book and then started writing the first chapter of her first book after that.
- The important point is to keep your objectives in mind and build towards them in a continuous fashion.
- I will put in a plug for any course that will help you with Visual Storytelling...we have one at UMass that is very well done and the speaker is Lisa Gussak, from the Family Medicine Department.
 - They will help you with constructing ideas and moving forward towards your objectives.

Slide 8—Structure:

- Let’s talk about slide structure.
- Basic rules include spelling, punctuation and grammar. Slides should compliment what you are saying and not contradict you because of a simple mistake. Errors distract from your presentation and people may conclude that you put the lecture together at the last minute. The take home message: commas can save lives!
- Font selection can be important!
 1. First, not every computer has the same fonts (varying OS’s and versions of PowerPoint). For example, PCs and Macs differ on a lot of font choices, so you need to be aware of this and either choose a common one, or embed your particular font into the presentation so you don’t run into problems.
 2. Second, some fonts are just not legible from across a large room, so “Go big or go home”. If you need to shrink the font size on a slide, you are likely overfilling the slide. Just say what you want and emphasize the *points* on the slide. Try to avoid italics...they are HARD to READ.

Slide 9—Structure (cont):

3. Third, remember that COLOR counts and will affect your lecture in unanticipated ways. [CLICK] For example, green is extremely tough simply because many projectors cannot hit that spectrum of light very well, so it fades and is hard to see from far away (even in total darkness).
 4. Lastly, fonts are often paired for a reason. There are families of fonts[CLICK] that work together (many of them are on your computers already...just scroll through and look them over). When in doubt, go with what looks good.
 - Serif versus Sans serif. There's a slide further along that details the differences between "serif" and "sans"
- Think about the environment you will be presenting in!
 1. Small vs large room
 2. Light saturation
 3. Equipment peculiarities
 - All of these will affect your final product and, therefore, your ability to communicate. Remember to test in a similar environment to what you will be lecturing in. What looks good on your computer may look totally different to your learners.

Slide 12—Structure Structure Structure:

- Keep in mind that many prepared slide templates have embedded color schemes with font sizes and styles set in place. These may have only been chosen because they matched the corporation's logo and/or colors.
- When in doubt, use a plain background and choose your own styles as per the guidelines above. You can convert the slides and set a Master Slide template that can be saved and used in the future.
 - We will be discussing Master Slides in a little while....

Slide 13—Simplify:

- When thinking about the structure of your slides...Keep It Simple, Silly. [CLICK]
- The message should not be your slides, but rather the content of your talk! Complicated fonts, colors, pictures and slide transitions end up diluting the communication instead of enhancing it.
 - There is a great trend in shifting the emphasis onto having a conversation with your learners.
 - Research suggests that humans can process 6 items or less in ~200 hundredths of a second, allowing them freedom to then listen to what you are saying.
 - More than that number, takes 1.5-2s to process. A difference of 800%. [CLICK]
 - This means it takes them 800% more processing power to understand what is on the slide.
 - The lesson is....keep your slides BRIEF and uncluttered!

Slide 14—Serif vs. Sans Serif explained:

- In typography, a **sans-serif**, **sans serif**, **gothic**, **san serif** or simply **sans** typeface is one that does not have the small projecting features called "serifs" at the end of strokes. The term comes from the French word *sans*, meaning "without".
- Sans-serif fonts tend to have less line width variation than serif fonts.

Slide 15—Content Delivery:

- So let's discuss the actual delivery of your talk.
- To start, what problems have you encountered with previous lectures or teaching discussions? [CLICK]
 - I have a list of common issues that some of my colleagues have encountered. [CLICK]
- NAP stands for Nodding At Presentations

Slide 16—Chris Rock:

- Chris Rock was asked why he never stands still or sits during his routines. He answered that he learned from watching several influences, including:
 - His Pastor—did it to keep Parishioners awake.
 - Eddie Murphy—did it to intimidate hecklers.
 - Luther Vandross—did it to connect with his female fans.
 - Mr. Rock clarified that he learned to always engage the audience and "never let them get too comfortable in their seats". That way, he knew they were paying attention and would appreciate the nuances of his tone, the cadence of his delivery and the pregnant pauses he utilized to enhance his material.
 - This can be a useful tool to keep people engaged regardless of the content of your talk.
 - BUT IT SHOULD NOT SERVE AS A DISTRACTION AWAY FROM YOUR DISCUSSION!
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Slide 17—Public Speaking:

- The first rule of public speaking is to speak, not read. Your slides are there to emphasize points and allow the learner to “listen”, and not have to write everything down.
 - Avoid sentences on the screen unless absolutely necessary. That will distract the learner and inhibit working memory from encoding what you are saying into deeper memory, and therefore understanding. Translation, the learner is too distracted to hear what you are saying.
 - Next, project to all parts of the audience. Remember, each one of them should be part of the discussion.
- Lastly, it’s okay to be nervous or to mess up! It’s how you deal with it that will enable your message to still be heard.
 - The best way to be less nervous is to PRACTICE!
 - I suggest using a live test audience, such as a knowledgeable colleague or even a spouse. But choose someone who is unafraid to hurt your feelings and give you honest feedback.
 - ANECDOTE (if needed): “According to most studies, people’s number one fear is public speaking. Number two is death. Death is number two. Does that sound right? This means to the average person, if you go to a funeral, you’re better off in the casket than doing the eulogy.” —Jerry Seinfeld.

Slide 18—Storytelling:

- Build your content one layer/level at a time. Each new item should build off the previous and move the discussion forward, like a story.
- This is why clear objectives and a roadmap are so essential...they provide a structure to work off of, like a table of contents.
- Minimize interesting-yet-extraneous information (AKA seductive details). **[CLICK]**
 - While they may provide humor or allow you to engage your audience, there is some data to suggest it may decrease cognitive processing of the scientific point that is being conveyed.

Slide 19—After the Lecture:

- Your talk does not end when you stop talking. The questions at the end of your lecture are very important because you are engaging your audience.
- As such, you need to prepare for, and allot appropriate time for questions and answers. This way, you can have slides to assist with the anticipated questions.
- You can become facile enough with PowerPoint to be able to utilize the programming to immediately go and find the pertinent slide and bring it back up while you answer the question, to add emphasis to your speaking point and help the audience understand.
- Cover the brief amount of time needed to do this by repeating the question for the whole audience to hear (which should be done anyway, for reasons of clarity).
 - Example: “On the slide with fonts, what did you mean by sans serif again?”
 - [Note: you should say the following line out loud to the learners—PJS].
 - “You can right click (if using a PC) or go to the slide icon in the lower left corner (if using a Mac or PC) and click on it bringing up a menu. Move the mouse over ‘Go to Slide’ and it should give you the numbers and titles of each slide. Now it’s up to you to pick the correct one, but you should know your slides well enough to do so smoothly and quickly.”

Slide 20—Designing the Epilogue:

- Here is a 6-point system developed by Dr. Falcone from the University of Pittsburgh to effectively answer questions at the end of a presentation and reinforce the educational experience at the same time.

Slide 22—Problems...

- Let’s look at some examples of challenging presentations.
- Remember to look at them critically and apply what we have already learned.

Slides 23-25—The Gettysburg Address

- There are some obvious problems with trying to present one of the foremost speeches in history as a PowerPoint. It doesn’t work!
- This would be better as a live discussion, perhaps with a picture of Honest Abe in the background instead?

Slide 26—Need for Maintenance Fluid

- This slide is probably a little too busy for any learner to comprehend during a lecture.

- Too many words.
- Too much color.
- Of note, there are 114 slides in this presentation.
- **Content is excellent, however...**just not on the slide. This is what we should be SAYING to the learners and use the slides to emphasize the point.
- As before, avoid sentences on the screen.

Slide 27—Injuries by Body Site:

- What do you think about this?
 - Sadly, this is one of my early slides.
 - Every time I put it up I felt the need to apologize, since it was difficult to read.
 - What I should have done was print it out on a page and hand it to my audience if it was truly important. I could then mention it and have them look at the table on their page.

Slide 28—Racquetball Fundamentals:

- How about this slide?
- This slide is from the internet and is touted as an example of overutilization of PowerPoint's animation features. Every single line animates in a different way, adding nothing to the presentation and only serving to distract from the lesson (i.e., the rules of racquetball).
- I had one audience member tell me this was the PowerPoint version of "jazz hands".

Slides 29-20—[a confusing mess of images and arrows]

- However if utilized in a slow build, adding images as you discuss them with your audience, this can be a great example of dual channel learning with audio and visual working in tandem.
- Dual-channel is a cognitive theory of multimedia learning based on three main assumptions:
 - 1) there are two separate channels (auditory and visual) for processing information; (usually ~80% visual and 10% auditory).
 - 2) there is limited channel capacity;
 - and 3) that learning is an active process of filtering, selecting, organizing, and integrating information.

Slide 31—Error Messages:

- Be prepared.
- Adapt & overcome.
- Expect that there will be an error, either clerical or technological. Be ready with spare copies of handouts or slides. Take your slides on a USB drive but also store them on a CD-ROM, smartphone or cloud drive.
- NEVER expect them to have the correct adapters (especially if you are a Mac user). For a few dollars, invest in your own wires and carry them with you.
 - Example 1: Dr. Wellman has a small "tackle box" with different adapters, wires, and power cords for his MacBook.
 - Example 2: I have my own mini projector, wires and connectors for my phone/iPad as well as MacBook.

Slide 32—Microsoft:

- Consider this presentation.
- What do you think?

Slide 33—Apple:

- How about this presentation?
- Steve Jobs was particularly adept at giving large presentations.
 - His team was noted to say that a remarkable 45-50 minute presentation likely had about 30 or so slides and 90 HOURS of preparation behind it.

Slide 35—Technology:

Let's get to the technology!

- This can be very useful as we deal with learners who are increasingly adept and enmeshed in the technological age.
- Beware that it can also distract away from your message if you use it inappropriately or to extremes.
 - Think of it like you would with PowerPoint...is it necessary and does it enhance what I am trying to teach?
- We'll discuss some audience participation, cloud participation/utilization/storage and (everyone's favorite) how to embed videos into your talk.

Slide 36—Know Your Tools!

- The first technology we should discuss is PowerPoint itself.
 - Start with the basics and go from there.
 - Use your local medical library and IT departments! Many have experts and may even hold classes.
- PowerPoint is fairly powerful and should be utilized beyond the “Template Wizard” and basic animations.
 - Presenter view allows you to utilize the notes and speak to the audience, rather than putting too much text on the slide itself.
 - For older versions (i.e., 2007 and earlier), this feature is only enabled when there are multiple monitors or a projector.
 - For PowerPoint 2010/11 or newer, click on “Slide Show” tab and choose “Presenter View”.
 - When you start, introduce yourself with a Black or White screen.
 - While in slideshow, just type “B” or “W”.
 - PowerPoint comes with its own pen...just hit “P” and use the mouse to underline or have a virtual laser pointer.
 - However, it’s probably best to leave the laser pointer at home and not use the pen.
 - The pen is also available in slideshow, in the bottom left corner near the slide selector.

Slide 37—Mastering Your Slides:

- The Slide Master is a very powerful tool and should be used.
- In PowerPoint, use the “View” tab at the top and select “Slide Master”.
 - When you are in the Master Slide, you can edit any number of things, including text style, font sizes, colors, and even spacing.
 - This will enable you to not only have complete control, but also to streamline and create uniformity throughout your lectures.
 - Plus, it avoids the frustrating little idiosyncrasies that creep up in any Microsoft product.
- I won’t go into great detail here, but play with this feature a little and I am confident you will see how incredibly easy this makes things.
 - In fact, our TOT slide sets were all hand-made using Slide Master and the fonts were locked in behind the scenes, making all the different presenter’s slides look similar, professional and easy to read.

Slide 38—Importing Slides:

- If you were wondering how I was able to import other slides into this presentation and keep the formatting, it’s a pretty easy thing to do.
- Basically, open both presentations and pick the slide you would like to bring in.
 1. Copy it.
 2. Paste it into your presentation. Don’t worry if it automatically changes to your current style.
 3. Go back to the “donor” presentation and find the formatting “paintbrush” **[CLICK]** on the tool bar. Make sure the “donor” slide is still highlighted and then click the paintbrush.
 4. Go to the presentation where you imported the slide. Double-click on the slide (on the side bar to the left).
 5. The formatting changes.
- Sometimes it might be best to create another new slide after the one you are about to re-format. Otherwise the new formatting will continue throughout the remainder of your slides.
- Also, the Slide Master will now hold both templates, and you can re-format into the old or new by just selecting the “Layout” button at the top in the slide tab under the “Home” bar.

Slide 39—Narrating PowerPoint, and more:

- Another aspect you can utilize is narrating your slides and that way you can get the factual information across to your learners BEFORE the meeting, so you can then have a more elaborate discussion with improved participation.
- This does make your PowerPoint file quite large (>10MB).
- There may be better programs for this, but it can be done using PowerPoint alone.

Slide 40—Cloudsharing:

- So how can we join the 21st century and also avoid killing trees by printing out so many handouts?
- Online handouts and slide notes for your audience, of course! You’ve probably seen this at large conferences, but you can do this for your rotating students and residents as well.
 - Barriers can include: setting it up; the problem of where to store your files without getting charged an arm or leg for data storage; and not to mention making sure your learners can access the information readily and easily.

- I have a several solutions for data storage:
 - 4Shared
 - Wikispaces
 - Padlet

Slide 41—2D Barcoding:

- Remember that other barrier to using online sharing? It was gaining access to your cloudshare files.
- 2D barcoding allows you to place a scanner code on the screen and allow your learners to immediately “grab” your slides stored on the “cloud”.
- These codes are actually unique identifiers that can store a large amount of information, including encoded URL (uniform resource locator). Essentially, they can allow the learner to quickly access the place where you stored your data.
- To do this, your learner audience will need access to a “QR Reader” or scanner...luckily, they all have one in their pocket.

Location for 2d barcode on this page:

<http://www.ncbi.nlm.nih.gov/pubmed/?term=barcoding+allows+immediate+downloading+of+powerpoint+presentations+by+smart+phones%5BTtitle%5D>

Slide 42—Padlet.com:

- Padlet and other cloud-based programs like it are ideal for regular small group teaching or even large lectures.
- You can utilize the board to have learners post answers to questions, present ideas and thoughts to the group, and even leave articles about topics.
- You are able to generate a 3D bar code link to your Padlet that you could embed into your presentation.

The QR code is a hotlink to my Padlet:

- <https://padlet.com/pjsell/PowerPoint>

Slide 43—Audience Participation:

- Audience response systems are not new technology.
- It is well-documented that, in certain circumstances, can engage learners and also allow the speaker to judge knowledge base in an anonymous fashion.
 - Audience members enjoy the lectures more and speakers can immediately assess the understanding of concepts just taught.
 - Learners like the protection of anonymity (reduces fear of “being wrong”) and Speakers can more accurately judge understanding, rather relying on the vocal minority.
- There is a growing amount of literature:
 - Studies of Radiology residents have shown that there were an increase in information retention at 3-months compared to standard didactics.
 - Residents were also found to have increased intraining exam scores when lectures were delivered with the technology.
- Unfortunately, it can be expensive, has a steep learning curve (for instructors) and has been labeled as “clunky”.

Slide 44—PollEverywhere.com:

- PollEverywhere technology (and others) allow for this same effect without utilizing expensive equipment.
 - Essentially, you can accomplish the same thing with the audience using their smartphones in place of the handheld polling “clickers”.
 - Can be designed for multiple choice, true/false, and open-ended questions.
 - Online service is free for small group polls with varying increases in fees depending on number of poll participants.

Slide 45—TodaysMeet.com:

- Another tool you can utilize is Today’s Meet.
 - This allows you to harness the back chatter....otherwise known as everything that is happening in the lecture hall that is not generated by the speaker.
 - You can post questions or discussion points to your learners before the lecture or have them post questions during the lecture so you can answer them at the end.
 - Likely more useful for small groups, yet powerful enough to be utilized in large group settings.
 - For example: may be useful to generate questions in real-time at large conferences where several speakers will lecture back-to-back with a question and answer panel at the end.
 - Limits comments to 140 characters (like Twitter).
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Slide 46—Embedding Video:

- You can directly embed your videos into your presentation, which will avoid the confusion or concern of when you arrive to lecture and the video doesn't work. As many of you realize, you have to travel with both your lecture and your video to make certain it will work. However, even if the video was present on the desktop, but in a new location, it would not work...meaning you had to reorganize your presentation immediately prior to giving it.
- I often got around this situation by always taking my presentation and video in the same folder. Traveling with the folder on my USB meant they were always in the same proximity as when I linked them
- Now, you can avoid all that by directly saving the video into PowerPoint...that way, it will always work.
- KeepVid (www.keepvidformac.net) = for Mac users and for those using PowerPoint 2010 and beyond.
- MP4 Converter for Mac (www.youtubeinMP4.com) = For Mac users.
- Freemake Video Downloader (www.freemake.com) = For PC users using PowerPoint prior to 2010.

Slide 47—Remote Control:

- There are also programs that will help get you out from behind the computer and in front of your audience.
- I have several that work, but there are many others.
 - a. For instance, I can run my MacBook from my iPad using a program called "SlideshowRemote" from the developer called LogicInMind.
 - i. This program is free and works fairly well. However, the paid application has more features and better tech support.
 - ii. The nice thing with this software is that I can see BOTH my slides and lecture notes on my iPad while I walk around the room. It is pretty cool, especially if you hate standing in front of a podium like I do.
 - b. I can also run PowerPoint slides from my iPad using the SlideShark application from developer BrainShark, Inc.
 - i. With a special VGA adapter, I can hook my iPad up to a projector and run the presentation through it.
 - ii. I can also download the Mobile Mouse app to my iPhone/iPad and use it as a remote control for my computer. Unfortunately, it's no longer free, and an individual subscription is \$8/month for one user and a limit of 1GB of data stored on their server.
 - c. MyPoint PowerPoint remote is a handy feature and ties directly in with your smartphone. You download the app onto both devices and your phone becomes your remote control. You can even see your notes if you arrange it the right way.
 - d. Slide Remote from Activize LLC is a way to immediately project your presentation to your learner's computers, tablets or phones! Your phone becomes your remote and will show you your slides (there are some limitations).
 - e. Mobile Mouse software allows you to turn your smartphone into an actual mouse, to run your laptop where the presentation is running. This will allow you to click on hyperlinks and other things in your presentation, or even to exit the presentation and show a video! (Slide Remote cannot do either of those).
- As a caveat, many of these technologies are excellent in theory, but there are a lot of variables and ways for it to go wrong. Typically, the connection between devices is either Bluetooth or Wireless internet. So you would need to make sure the set-up is working smoothly before you try it in front of a live audience.

Slide 48—Creating Teaching videos:

- So there is also this push towards creating snippets of teaching that can be viewed whenever the learner has time.
- Given the advent of ever-increasing hours restrictions and limitations of our medical learner's availability, this may be a viable "flip the classroom" option for you to get some of the more didactic type teaching accomplished to leave the face-to-face time for discussion.

Slide 49—Posting Your Video:

- These are some examples of sites (mostly free) to post your videos.
- Often, your Medical School or Hospital Library will be able to accommodate teaching videos in a secure-access site on their intranet for your learners. Talk to your IT/IS staff and find out what is available to you.