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Making a Point: Getting the Most Out of PowerPoint

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PERSPECTIVES

Making a Point: Getting the Most Out of PowerPoint

Many of us remember slide-based presentations and the hassle they were! Lugging around those carousel trays or innumerable plastic slide holders, organizing and reorganizing slides, matching them for dual projection, running the risk of losing them, and accepting the eventual deterioration from repeated use were just some of the problems, not to mention the days (or at times, weeks) it took to get slides processed. In the mid-1990s, all of this changed with the dissemination of PowerPoint (PPT) software (Microsoft, Bothell, Washington).

The earliest version of PPT dates back to 1984 and was designed for Macintosh computers (Apple, Cupertino, California). Three years later, it was bought by Microsoft and rebranded PPT. Widespread use did not occur until 1993, when it was included in the Office suite of programs. Starting with Office 1995, PPT became relatively intuitive and easy to use. A version for Apple computers was reintroduced in 1987 and became part of Office for Mac in 1998. Individual presentation screens are still called "slides" in reference to photographic film-based slides. PPT slides support text, graphics, illustrations, animations, transitions, and movies. A simpler program called PPT Viewer allows presentations when the PPT basic software is not installed on a computer. As implied by its name, this program does not permit changes to the presentation. Benefit: it is available as a free download (http://www.microsoft.com/downloads/details.aspx?FamilyID=048dc840–14e1–467d-8dca-19d2a8fd7485&DisplayLang=en). Google also offers a presentation program and the ability to save presentations created with it or other programs in Google Docs. This avoids having to carry a memory stick but forces you to have Internet access wherever you are presenting.[1]

The impact of PPT, positive or negative, is a matter of debate.[2] One side argues it improves teaching and retention, whereas the other feels it reduces complex issues to simple bullet points and is detrimental to decision making. Condensing information may be good or bad, depending on whom you ask.[3] Whether you like it or not, all radiology presentations are now done by using PPT or similar programs such as Apple's Keynote. Remember that a good PPT presentation is not synonymous with good teaching; good delivery of its contents is essential.

Whenever preparing a PPT presentation, I follow these rules:

- Use a solid background (textured or shaded ones are distracting; ones with subjects that are close to your heart, such as palm trees, sailboats, spaceships, are not acceptable).
- Use a simple background color (avoid "cool" colors, such as vivid green, bright yellow, hot pink); some companies such as Ford Motor Company limit presentations to just black and white.[4]
- Use a contrasting color for the fonts (I prefer a dark background with light-colored fonts, but the opposite works well too; remember to be tasteful).
- Use a simple font (Arial or Times New Roman is best).
- Keep the text simple and clean and use no more than 4–5 bullet entries; text animations should be added sparingly.
- Edit, edit, and edit. Dr Thomas Naidich once told me, "Typos on slides are like cockroaches: You can decrease their number but never get rid of them!"
- Avoid tables. If you must use them, make sure they are simple and short.
- Use your best figures and clean them up, adjust contrast and brightness, and place arrows on the findings (you may want to animate the entrance of figures and arrows, but do so tastefully).
- Use no more than 4 figures per slide. Make them large enough to occupy most of the space on the slide (nothing is worse than tiny images floating on a nearly empty slide).
- Avoid all "funky" animations (spirals, bouncing in, checkerboard, spinning, growing, and shrinking are okay in elementary school but not for scientific presentations).
- Avoid movies (invariably those who use them will have trouble when trying to play the clips in public, thus embarrassing themselves).
- Calculate about 1 or, at the most, 2 slides per minute of presentation (as a general rule, I think running over 10% of original time allowed is bad manners). When new to presenting, you may want to read off the slides, but more experienced individuals actually can say a lot with few prompts from their slides. A set of well-executed slides improves the speaker's confidence.
- Always quote the source of your material and data. Thank those who gave you the images.

Regarding the content of a presentation, remember that after the title slide, you will need a slide describing your goals/objectives and, more important in today's environment, one detailing any commercial relationships and other potential conflicts of interest you may have (even if you do not have any, a slide stating this is in order). I generally place a small mark on a slide halfway through a lecture and speed up/slow down the remaining content based on the time left. At the end, state your conclusions and thank your hosts. Remember the audience's perception of the presenter may be affected by his or her PPT presentation. Throughout a lecture, look at your audience. After all, they are the reason you are there!

After writing my own guidelines above, I asked Dr Robert Quencer the same questions I asked myself regarding presentations. Dr Quencer is a very experienced meeting organizer and speaker and delivers great presentations (he is also Editor Emeritus of the *American Journal of Neuroradiology*). This is what he had to say: "The most common mistake in presentations is just reading the slides. No one wants to hear what they can see in writing themselves. What is needed is personal input and one's experience. Concerning the slides themselves, limit the number of lines per slide to 7 in bold print, use a dark background with light titles, use the same background/font colors for the whole talk, and crop off unnecessary parts. Enlarge the images to the area of interest. Don't overlabel. No cute animations—just have the slides or portions thereof

appear. Start each talk with an objective slide—that is, tell them what you are going to tell them, then tell them again. Estimate 1 slide every 45 seconds. Drop antiquated slides; they make the presentation look dated. Be wary of AV files (sometimes they just don't play). Never run over your allotted time."

So, all his recommendations basically matched mine. What he had to say and what I liked best are the following: "A great lecturer speaks to the audience and not to the slides. A good hint is to discuss the slides as if you were one-on-one with a single person in the audience so the talk becomes personal. Tell the audience why the stuff you are presenting is important and useful in their daily interpretations. Do not present information which you find interesting but has little practical value to the audience."

I consider Dr Anne Osborn one of the best speakers on the circuit and a true international ambassador for neuroradiology. Her popularity stems from being a gifted speaker and the fact she always has beautiful slides (text and illustrations). I asked her to share some advice about how to prepare slides that are aesthetically pleasant and increase material retention. From her answer, I took the liberty of extracting the following: "Intersperse text slides with images. Or, even better, put text on the left and images that illustrate your points on the right of the same slide. Don't get overenamored with the fancy features of PPT; simple is often better. After all, the goal is to inform the audience, not dazzle and distract them. Radiologists are visual creatures. 'Eye candy' such as color graphics, displays, and pathology can enhance a talk and make it different from everyone else's on the same topic. Keep in mind: It is the images that 'tell the story.' Video animations can be eye-catching and informative—when used appropriately and not overdone. Last, when you give a talk, point (with laser or arrow) and hold at the feature you're describing; don't make circles. It's amazing how many relatively experienced and well-known lecturers do this!" She ended with a comment similar to one from Dr Quencer: "At the beginning, tell them what you are going to tell them. At the end, tell them what you told them. Leave them with pithy, pointed 'take home' messages, and not too many!"

Incorporating information outside of the field of imaging into a presentation makes it much more interesting. After listening to many speakers, I find that I learn the most when attending conferences that do this. Dr Thomas Naidich's presentations belong in this category. Tom masterfully integrates radiology with facts from biology and genetics. I asked him how much time/space should be given to aspects that are not directly imaging. Tom's response: "Imaging is gross pathology, in vivo, while the findings are still useful to the patient. Presentations must help the viewers to see, *holistically*, the set of imaging features that enable correct diagnosis. Color images of gross pathology summarize features and crystallize them into memorable visions of what we should seek in imaging studies. Presentations must help us to understand how studies impact patient management. Color photographs of the patient and surgery needed to treat the patient convey these lessons compellingly. For these reasons, 10%–50% of any imaging presentation should be the correlative patient, surgical, and pathologic material."

I also asked him how much of the material should be "new" information and how much should deal with "classic" teachings. He said: "The title of a presentation determines the mix of new and old material. For example, a lecture entitled 'Recent Advances in Stoke Diagnosis' should have 10% old material to bring everyone in the audience to the same baseline and to set the foundation for them to understand why the other 90% represents improvement in diagnosis. Conversely, a lecture entitled 'Classic Features of Ischemic Cerebral Stroke' should have 85%–90% of classic material and end with 10%–15% of new material that builds upon and advances the understandings given in the classic material. A lecture entitled 'Imaging Diagnosis of Stroke' should simply set out the best techniques and criteria for diagnosis, in the order they would be applied, without concern for whether the techniques are old or new."

Great speakers are also great entertainers, and one of the most entertaining is Dr James Smirniotopoulos. Jim incorporates many jokes into his lectures in a truly skillful fashion. Not all of us have that ability, so I asked him what advice he would give our readers regarding this issue, and this was his (funny) response: "Someone once told me 'All learning is limbic.' I took that to mean that you are scared (frequent mention of the boards/Certificate of Added Qualification and 'malpractice' are great limbic stimulators), you are laughing (either AT me or WITH me), you smell something, or you are having a seizure. Since I can't control most of these, I go with laughing. If you cannot tell a joke, then practice or take a different approach. Believe it or not, being 'funny' (as opposed to looking 'funny') is an art and a craft. You can learn how to be 'funny' and how to tell a joke. Timing and details are what make a joke funny. A punch line or ending that is totally unexpected works best. All things considered— don't do jokes if they don't work for you."

I also asked him how to make a serious topic more palatable and entertaining. He answered: "Palatable and entertaining are different. Subjects can be made palatable (digestible) by organizing the material into 'bite-size' chunks. Most subjects can be broken down into components that are easily understood. Then you can draw them together—like pearls on a string—to summarize a complex process. I also find that analogies, even bad ones, can help the learner grasp difficult concepts. For radiologists, visual analogies are particularly useful, both to illustrate and also to act as a 'memory hook.' Entertaining—well, that's different. Many people have great success by using cartoons (watch out for copyright concerns). You can also download amazing amounts of royalty-free clips. One of the most important lessons I have learned is to make everything relevant to the topic! Don't show pictures of mountains— unless you are talking about 'watershed.' Don't show a picture of a snowman— unless you are describing a coronal image of a pituitary macroadenoma."

When one organizes a meeting, what kind of speaker does one look for? I posed this question to Dr Edmond Knopp, who is involved in organizing many meetings domestically and internationally, and this was his response: "When selecting a lecturer, it is important that they are an expert in the area being discussed. But that is clearly not sufficient—they need to be exceptional communicators, both verbally and visually. Their speaking style needs to fit and be appropriate for the audience. They should be comfortable and knowledgeable with the material so as to be almost 'matter of the fact' when presenting it.

But for us as neuroradiologists, it is not just the words, it is the images as well. Their presentation material (slides) must be clear and easily interpretable. While some 'glitz' is good, too much detracts from the message."

Last, when preparing a conference, look at your slides as if you are sitting in the audience. What looks good on the small screen may not look that good on the big one. Many thanks to my colleagues quoted above for taking time to answer my questions. With this editorial, I have conveyed thoughts from several expert speakers, and I hope our readers will be able to use these to maximize the power of their PPT presentations!

References

1. Google docs. Create documents, spreadsheets and presentations online. http://www.google.com/google-d-s/intl/en/tour1.html. Accessed April 7, 2010
2. WIRED. PowerPoint is evil. http://www.wired.com/wired/archive/11.09/ppt2.html. Accessed April 7, 2010
3. Savoy A, Proctor RW, Salvendy G. **Information retention from PowerPoint and traditional lectures.** *Computers & Education* 2009;52:858–67
4. PowerPoint presentations: the good, the bad and the ugly. http://www.shkaminski.com/Classes/Handouts/powerpoint.htm. Accessed April 7, 2010

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EDITORIAL

Scaling Back on Scales with a Scale of Scales

An ever-increasing number of articles are published introducing clinical scales to describe neurovascular diseases. Unfortunately, unless you are some kind of idiot savant, there are now too many scales to remember. It would be helpful to have some way of knowing which scales are worth remembering and which are not. Most would agree that those worth remembering are those that are useful. A scale may be useful in a number of ways: First, it might allow us to predict outcomes for patients in our practice. Predicting outcomes helps us to counsel patients and choose the best therapy. Second, a scale might be useful if it can be used in clinical trials to objectively select patients to enroll or to provide objective descriptions of patient outcomes. For any scale to be useful for these purposes, however, it needs to be clinically relevant, valid, and easy to use. Unfortunately, many scales being published currently lack 1 or more of these qualities and are, therefore, not useful in the world of real patients. Thus, we propose a Scale of Scales to help you decide which are worth remembering and which are not (Table).

The Scale of Scales is founded on the fundamental principles of clinical relevance, validity, and reliability. "Clinical relevance" means that the scale informs us about something that is important to patient outcome. "Validity" means that it actually measures or describes what it is supposed to measure or describe. "Reliability" means that the scale is reproducible, with little variation among users of the scale. The Scale of Scales incorporates assessments of these key characteristics and assigns grades of I through V, with grade I being the most benign beneficial form of scale and grade V being the most malignant useless form of scale. In addition, we added subgrades a and b, to classify the scale as easy or difficult to remember and/or use.

The Scale of Scales

Grades	Description
I	Clinically relevant, reliable, and valid
II	Clinically relevant but not yet validated or shown to be reliable
III	Valid and reliable, but not clinically relevant
IV	Clinically relevant but shown to be invalid or unreliable
V	Not clinically relevant, not simple to remember and use, and not validated
Subgrades	
a	Easy to remember and/or use
b	Not easy to remember and/or use

Physicians are predisposed to memorize and follow rules, so it is perhaps easy to get us to blindly follow along in categorizing diseases according to some inane scale. We may think we are practicing medicine when we classify our patient's disease according to scales in the literature, but maybe we are, in fact, just engaging in a pointless pretense of understanding. Just because we can classify something with alphanumeric symbols does not mean that we understand it. The scale gives us an answer, but it is not always clear if it answers an important question. Scales and classifications can both make the simple seem complex and the complex seem simple, which could easily lead to distraction from relevant clinical issues. With the rapid growth of the medical literature, it is difficult for practicing physicians to keep up with important developments, so it is increasingly important that we not clutter our minds with scales of dubious value.

Classification scales of dural fistulas, carotid cavernous fistulas, and spinal vascular malformations and fistulas are abundant and redundant, as well as abundantly and redundantly confusing. Many of these classifications neither predict natural history nor guide therapy. They serve only to confuse conversation with coded language. It is preferable to simply state that the patient has a direct carotid cavernous fistula than to cryptically state that the patient has a Barrow type A fistula (a grade IIIa scale).[1] When we speak or write, we should strive to use terminology that people understand.

Our field has still not matured to the point that we have many well-developed scales, but papers describing new scales will be essential to progress. Many scales related to neurointerventions are based on angiographic appearances and attempt to divide a continuum of variability into discrete categories (ie, perform analog to digital conversion). Dr Tomsick[2] wrote eloquently about this problem in the conduct of stroke trials. We wrote about the reliability of angiography scales used in research of endovascular aneurysm treatments.[3] The purpose of these previous articles was to point out that new scales must be developed with respect for proper scientific methodology and the basic issue of clinical relevance, but these articles seem to have been largely ignored. For example, a scale of endovascular aneurysm coiling results has been put forth as a multisociety-approved reporting standard for future research,[4] but it has never been tested for reliability. Not only has it been neither tested nor used in any study of any kind, but an