

# TIPS TO IMPROVE POWER POINT PRESENTATIONS FOR RADIOLOGY RESIDENTS

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With the advent computer technology, digital projectors and power point software's presentations have become a common method of delivering educational information to residents. In radiology, the advent of picture archiving and communication systems (PACS) has made it a lot easier to bring images of high quality into teaching presentations. As we ascend into the new millennium of film-less environment and leave behind slide projectors along with radiological films, we also need to upgrade ourselves in delivering powerful presentations. It is imperative for every radiologist to have a firm grasp over basic principles of power point presentation for making an effective radiological presentation. Considering its importance, the examination and residency training body in Pakistan has made it mandatory for every radiological residency program to include power point presentations by radiology residents as part of their teaching curriculum. A number of articles have been written to describe methods and techniques for effective scientific power point presentations.<sup>1-5</sup> The purpose of this article is to discuss implications of power point presentation purely from a radiological perspective. We will be discussing only the most common mistakes that were observed during radiological presentations by radiology residents over the last few years in our department and in various radiological conferences and then make suggestions on how to rectify them. Most of the suggestions and recommendations made in this article are taken from

international literature<sup>1,2</sup> along with some from the lectures and presentations on improvement in power point presentations.

Common mistakes of radiological presentations that are most frequently observed are the use of slides with too many lines per slide and too many words per line resulting in over crowding, spelling errors, distracting animation effects, using inappropriate letter casing, poor quality and editing of radiological images, wrong color schemes and inadequate management of allotted time. We will address each of these separately:

## 1. How to avoid over crowding on a slide:

This is by far the most commonly made mistake in radiological presentations. One of the ways to determine the appropriate amount of text for a slide is to use the "rule of six".<sup>1</sup> This rule refers to a maximum of six lines per slide and six words per line. "6 x 7" can also be used, however generally the fewer words per slide, the better. The written text should be in a form of points rather than complete sentences. This will make it easier to make lines shorter.

The more text there is on a slide, the greater is the risk that the audience will either become disinterested or read the slides instead of listening to the presenter. Please remember that the purpose of the text is not to provide something for the presenter to read, but to emphasize a point that the presenter can expand upon. This does require extra effort on the part of presenter but results in better control of the audience and shows that the presenter has command over the subject. The written text on the slide can be taken as hints for the

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presenter from which he can elaborate his thoughts. This will make the audience look and listen the presenter rather at the slide.

## 2. Text style and font size:

One of the common dilemmas that the residents face is what font to use and of what size. There are no set rules to answer this question but following points should be considered while making the presentation.

There are two font styles, serif and sans serif, which are recommended (Tab. 1).<sup>1</sup>

Serif	Sans Serif
Times New Roman	Arial
Courier New	Arial Unicode MS
Letter Gothic	Comic Sans MS
Georgia	Antique Olive

The serif (with tail) is the small tail added to the ends of letter strokes as a decoration. Examples of these types of letters include Times New Roman, Courier and Georgia. Sans serif (no tail) fonts include Arial, Comic Sans MS, and Century Gothic. Both of these have advantages and disadvantages; serif fonts although look more pleasing to eye yet are relatively difficult to read, sans serif on the other hand provide better readability but are relatively plainer than their counter parts.

The selection rests solely on the presenter considering the merits and demerits of both. The general suggestion is to use one font throughout the presentation for uniformity. Some articles suggest the use of two fonts.<sup>3</sup> Generally speaking if two fonts are to be used we recommend using serif for headings and sans serif for rest of the text.

Regarding font size a simple way to get it right is to view computer slides on your monitor from 10 feet (2 meters) away. If you can easily read it, so can everyone else in the room.

## 3. Letter casing and spelling checks:

The choice of letter case (capitals, lowercase, or a combination) also demands special attention. While some articles have suggested that a combination is more readable than either on its own, research supports the use of lowercase type styles for improved reader comprehension.<sup>3,4</sup> Therefore it is recommended that for maximum presentation effect, one should predominantly choose lowercase letters.

One must be very careful in checking spelling mistakes. Misspelled words send a negative message to the audience that the presentation was carelessly crafted and creates a very bad impression. An advantage of using power point is the availability of Spell Check feature that comes with PowerPoint software. If used properly spelling mistakes can be avoided with very little effort. If mistakes are made on the presentation it is better to keep moving with the presentation and not to apologize. Mistakes should not be on the presentation in the first place.

## 4. Font colour and background:

Choice of correct font color and background can significantly uplift a presentation, and vice versa. Background and font colors should please the eye and should not clash or produce eyestrain.<sup>5</sup> The general recommendations are to use contrasting colors i.e. light on dark or dark on light and to use colors that complement each other. For radiology presentations in particular blue, dark blue or its shades are most ideal. Black background for radiological images is recommended as they emphasize and enhance the image without causing distraction. For consistency, some recommend black background throughout for text slides as well. Whatever the color choice it is advisable to keep the background simple one color or gradual fades. One should refrain from patterned backgrounds, which can reduce readability of text and cause distractions. Also, one must avoid red/green colors at all costs as 99% of color blindness involves these two colors.

## 5. Radiological images:

Radiological images are the heart and soul of an imaging presentation and must be used to reinforce

textual information. As a general rule, a radiological presentation should include at least as many image slides as text slides if not more. A poor image, however, is worse than no image, and poor-quality images should not be used. Radiologic images should be properly cropped and centered. Patient names and particulars must be omitted to maintain confidentiality. Ideally, only the relevant part of the image, with enough surrounding image to put the findings in proper context, should be retained and projected to the audience. Further emphasis on a particular part of the image may be made by using arrow heads.

#### **6. Cursor versus laser pointer:**

Although it is still preferred by some to use the laser pointer, certain advantages of using cursor make it more advisable than its counter part. The foremost advantage is that one can face the audience while using cursors thus maintaining connection with the audience, whereas, when using a laser pointer one has to turn his back to the audience and this partially hampers the attention of the audience.

The cursor can be enlarged making it more visible to the audience. Also with the use of cursor it is easier to speak into the microphone. In some radiological conferences the presentation is being shown on multiple screens thus making the use of cursor mandatory as laser pointer cannot be projected on all screens. Thus even if one prefers the use of laser pointer, we suggest that one should be familiar with the use of cursors.

#### **7. Using animations, fancy transitions and sound effects:**

It is a common observation that mostly fancy transitions and animations lead to a significantly bad impression rather than a good one. The primary reason is not being able to correctly time the animation with his speech. If done properly it may have an excellent impact but requires a lot of rehearsing and experience. Also, there are many factors that are not in ones' control; most common being incompatible computer software in the presentation room to ones' animation. Therefore we would not recommend use of animations in radiological presentations for radiology residents.

As regards transitioning, simple transitions are better than the animated ones which at times are confusing. In the use of text, it is recommended to use "Appear" and "Disappear" option, but requires rehearsing for accurate timing. Use of sound effects is usually discouraged in radiological presentations as it most often distracts the audience rather than reinforce a message.

#### **8. Time management:**

Time management is a very important aspect which is not given due consideration in most presentations. Both, too short or too long presentations can significantly mar the overall effect of the presentation, the latter doing the most damage. A good strategy is to plan, prepare, and practice for 75% of the allotted time. As a general rule, every slide deserves at least 10 seconds and usually not more than 1–2 minutes. If it takes longer, redo the content in 2 slides. It is suggested to keep graphical figures and images up for a longer time while you talk and textual material up for a short time only.


## **Conclusion**

To conclude, Power Point software if used properly can dramatically enhance the effectiveness of a radiological presentation. On the other hand inappropriate use may substantially detract from the quality of the presentation.

We wish the very best of luck to all radiology residents in their future radiological presentations.

## **References**

1. Collins J. Education Techniques for Lifelong Learning Giving a Power Point Presentation: The Art of Communicating Effectively. RadioGraphics 2004; **24**:1185–92.
2. Daffner RH. Opinion on Improvement of Scientific Presentations:Using PowerPoint. AJR 2003:181.

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3. Vetter R, Ward C, Shapiro S. Using color and text in multimedia projections. *IEEE Multimedia* 1995; **2**:46–54.
  4. Hartley J. *Designing instructional text*. London, England: Kogan, 1986.
  5. Thompson WM, Mitchell RL, Halvorsen RA Jr, Foster WL Jr, Roberts L. Scientific presentations: what to do and what not to do. *Invest Radiol* 1987;**22**:244–5.