WBU External Resource Paper

WBU Power Point Guidelines (5-19)

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Executive Summary:
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Guidelines on how to make the use of PowerPoint and other visual presentations accessible to audience members who have a vision or print impairment

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Section A

Your audience

As you stand at the rostrum remember that your audience is not really made up of a group of fellow business tycoons, or potential customers, or civil servants, etc but, that it is made up of fellow people like yourself. Therefore, that means some might have refractive errors requiring the use of spectacles or contact lenses, some might have low vision or be blind, and some may have other print impairments such as dyslexia or colour blindness. What they will all share is a difficulty to follow and absorb the full impact of your impending presentation.

These guidelines offer you some simple guidance on how to maximise your impact by ensuring that your presentation, and your delivery technique, is as accessible as possible to **all** your audience members. They contain both practical information and good-practice guidance.

Remember – According to the World Health Organisation there are 314 million visually impaired people in the world today. 37 million are blind, 124 million are low vision after best correction, and 153 million are visually impaired due to uncorrected refractive error causing problems with distance vision. Additionally, it is generally accepted that up to 4% of the population suffer from severe dyslexia. Your audience may include people from all of these categories.

Section B

Help for those with Low Vision, Colour Blindness and Dyslexia

'Low vision' is a spectrum of see-ability, with some people having good peripheral vision enabling safe mobility, but difficulty in reading, whilst others with tunnel vision might

be able to read with the help of magnification.   So whether using PowerPoint or transparencies, please:

Use a high-contrast colour scheme easily visible from the back of a large room. We recommend either a white text on a dark background or dark text on an off white background.   Please remember that a pure white background creates uncomfortable glare for people with low vision and dyslexia.

It is not possible to define a particular best colour combination that will optimise the legibility of your projected text for various reasons, including the fact that everyone's level of sight is different. Please ensure you don't have a background which is multi-coloured.   If background images are desirable please use only a low brightness as otherwise they make text very difficult to read.

Designing your presentation slides

This section looks at the ideal
- Font size and quantity of text on a single slide
- Font type
- Colour and Brightness Contrast
- Way to use figures and graphs
- Animation
- Way to orally support your slides
- Supporting handouts

1   Recommended font size and amount of text on each slide

It is good practice to have only a few lines of text, or bullet points, on a slide, ideally no more than five to seven and only about five or six words per line, justified left. There must be enough space between lines to prevent 'crowding' effects during reading.

Text must be large enough to be read by most low vision people in the front of the audience and by people with normal vision in the back of the hall.   Therefore, we recommend having no more than six lines of text with a line spacing of 1.5 on the slide, having allowed for a one inch margin on all four sides for headers, footers etc. This can be realized with character size of 48 point. We recommend this size unless more space is needed for long words, but never using less than 32 point.

It is helpful to use mixed upper and lower case letters which are easier for low vision participants rather than all capitals.

2   Recommended font type

Please use sans serif font types such as Helvetica, Arial and Verdana rather than font types like
'Times New Roman', because low vision people have difficulty with reading text in font types with serifs.

Avoid the use of italic font style because this style is also difficult to read for low vision people and even hampers normal vision reading.

Try not to use more than one font type per slide. If you want some text to pop out, use a larger font size, or use bold style, for that text, to attract attention.

If information on the slide is only important for you as presenter, such as a header with the title of the presentation and the page number, keep this as small as possible to save space for the information that is important for the audience.

3   Color and Brightness Contrast

Again, for some, colour contrast can improve see-ability, but different medical causes of low vision respond to different colours being contrasted.

Have you ever wondered if two colours, background and foreground, offer a good colour contrast for people with low vision?

Please find below a link to a very helpful online tool.

To open this link control and left click.

 http://www.snook.ca/technical/colour_contrast/colour.html

When using this tool click on the slide bar icon of the Foreground and Background colour boxes.   By sliding them to represent your intended foreground and background colouring, you must aim for a 'Yes' in the bottom section of the Results box.

There are two types of contrast - brightness and color. The highest brightness contrast is between black and white. Objects have the highest colour contrast when they have complementary colours.

Examples of complementary colours are red & green and yellow & blue.

Be aware that contrasting full colours have no brightness contrast and thus cannot be discriminated by colour blind people. So the main contrast in a slide must come from brightness and not from colour.

Note that many people suffer from glare, so try to apply dark background colours (low brightness) and use bright colours (high brightness) for the text to please low vision

and elderly people. A white font on a deep blue background is a very good combination.

Often, artists and designers prefer to use low contrasts. If you are one of them, be aware that your text and figures are difficult to read for elderly and low vision people. Furthermore reading can be difficult for every one under poor light conditions.

As said, text with high colour contrast without brightness contrast cannot be read by color blind people. In particular, they have difficulty with red-green perception. These people have difficulty in reading green text on a red background. So when it is important to have a red background, it would be helpful to use dark red and apply white fonts or when a green background is required, use a light green background and a black font.

Be aware that many colour blind people are less sensitive to red. So we suggest not using a black font on a red background or red text on a black background.

4   Figures and graphs

If you have figures and graphs, keep them as simple as possible. Use brightness contrasting colours in the same way as with text, as above.

Use sans serif font types for the text in the figures and again never use more than one font type per slide and avoid the use of italic font style.

5   Animation

Please keep animation to a minimum as this can be very confusing for people with low vision.

6   Oral support during slide viewing

When you introduce yourself, explain the format of the session, when you will take questions (ie during the session or at the end).   Make it clear if you are prepared to be interrupted to be asked to explain something.

It is helpful if all text presented on slides is read aloud by the presenter
because for some low vision people sitting in the front of the audience, text and figures will still be too small and normal sighted people, in the rear of a large audience, may also have the same problem.

Figures and graphs should be explained because low vision people reading with a monocular, people with tunnel vision and slow readers, in the back of the audience, may have difficulty in orientating themselves to find where to start reading or viewing.

The presenter should explicitly mention the region of interest in the slide.
Although pointing with a small light arrow to the region of interest is helpful for fully sighted people, it is not sufficient for those with low vision or a restricted viewing field, since it cannot be identified quickly.

It is helpful to explain the slide in an expressive manner so that the audience understands where to look. For example:
'On the screen you see a diagram with four blocks. The block in the lower right corner …'

Be aware that some parts of a figure, for example, the legend of a bar graph are always difficult to interpret, even for people with normal vision. So another expressive description of a slide is recommended, for example:

'On this slide the results are summarised in a bar graph. The bars on the left hand side display the data of the experimental condition; the bars on the right hand side …'

You should be aware that not everyone in the audience is able to read a long text. So read the text, slowly and clearly. Don't skip any word and be sure that everyone who wants to read themselves has time before you move on to the next slide.

If a long text is very important, for example a definition of an essential concept, refer to the handout for later re-reading.

7 Handouts

Please always distribute before the presentation, especially to low vision and dyslexic participants, copies of your slides together with important information that will not be presented on the slides. Handouts offered at the beginning of the session can be a useful point of reference and will tell the audience if further notes need to be taken.

Be aware that colour is lost in grey tone prints. This is another reason to use brightness contrast as the basic technique to contrast text and figures from the background.

Be sure that you have enough full page copies of your slides for people with reading difficulties.

Section C

Help for those who are blind

1 Have your material in accessible formats such as Braille, CD's, or available on a memory stick for blind audience members to download on to their laptops. This will mean that, at least if a blind person cannot see the PowerPoint presentation, or read the handouts, they will end up with access to the same information as their fellow attendees at the presentation.

2 If you display it, say it. Imagine that you were hearing your own presentation on the radio, would it make sense and would you fully understand all the information that was being put across?

3 When talking through your PowerPoint presentations to your audience, use nouns. Pronouns on their own, as in: **This** leads to **that,** which is better than **the other,** is as good as a car without petrol.

Section D

Conclusion

The WBU recognises that visual aids are a standard feature of modern presentations, and often house styles and house colours are required to be incorporated into them. These guidelines are therefore not intended to be prescriptive, but rather as suggestions of good practice. They are designed to help users include all members of their audience, thus maximising the accessibility of the presentations for all audience members.

The accompanying PPT file demonstrates the difference between the use of and the non-use of these guidelines.

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These guidelines have been prepared by the World Blind Union's Low Vision Working Group, with support from the British Dyslexia Association.

For further information please contact
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www.worldblindunion.org