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Design an Effective Power Point Presentation

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> The ability to effectively present information is one of the skills that an educator needs. Media and technologies offer powerful potentials for enhancing the learning process, and as Smaldino et al (2008) note the roles of both teacher and learner are being impacted upon with the increased sophistication of classroom media.

Introduction

There is an ever increasing pressure, not only on teachers, but also on conference delegates to deliver their sessions via Power Point presentations. Increasingly this format is being regarded as presenting a more credible message than those delivered via their 'low tech' cousins the white board, flip chart and overhead projector. Designing appropriate educational media to enhance and support teaching is a key component of instructional planning and some key principles apply when thinking about how to develop a Power Point presentation. The aims of a visual design are to:

◗ Ensure legibility

◗ Simply the message

◗ Increase learner engagement

◗ Focus learner attention on important points

◗ Provide an alternative channel of communication

Media Design

It is difficult to imagine life without media; increasingly the world we live in is represented to us via imagery. Commercial advertisers are skilled at linking influential ideas and images with their products to allow for strong brand identification. The Coca Cola and Macdonald's signs have become cultural icons representing far more than the products they promote. As medical educators we may not see ourselves as part of the 'Pepsi generation', but we too have a product to 'sell' and therefore like commercial media designers need to achieve symbolic impact in order to facilitate learning.

Design Elements

Remember that the whole purpose of the Power Point or any other presentation is to engage the learner, aid their understanding of the topic and enhance their ability to process, store and retrieve the information in order to act on it at a later stage. There are some practical guidelines that can be applied to designing text and graphics and several components that you need to keep in mind when you are designing not only Power Point slides but also handouts and posters:

◗ Visual Elements

◗ Typographical Elements

◗ Added Appeal

Visual Elements – there are any number of visual resources that can be down loaded from the internet. They can enable you to add realistic images – photographs, X rays, for example that can be incorporated into the presentation to enhance the learners appreciation of the subject matter. Organisational charts and concept maps can be utilised to help learners to understand concepts and the relationships between them.

Typographical Elements – incorporate a number of different components, not only the letter styles and size, but the use of capitals, colour and the spacing of the text. All of these factors need to be considered, but are often overlooked and can result in parts or all of a presentation being unreadable from the back of a lecture theatre or conference hall. This is embarrassing for the presenter and a missed educational opportunity for the learner.

◗ Fonts

The selection of an appropriate font is complicated by the fact that there are thousands to choose from. For clarity and ease of reading from a Power Point slide it is recommended that you use a;

Non-serif font like this (12 pt Arial)

It's easier to read at a distance than a serif font like this (12 pt Times New Roman).

Times New Roman, the default setting for most PCs, was designed to replicate the curls of handwritten text. Whilst the eye is accustomed to following this convention in printed matter, books and handouts for example, the ability to read and understand messages from a projected image is enhanced through the use of a block font.

Limit the number of different styles such as fonts, **bold**, *italics* to a maximum of four. **Don't overdo it!**. This confuses rather than clarifies.

◗ Case

SENTENCES WRITTEN IN CAPITALS ARE DIFFICULT TO READ

We are accustomed to sentences written in lower case

We are conditioned to reading conventions with a capital letter at the beginning of the sentence only; information processing is confused by change or excess – so take care to set out each slide as clearly and legibly as possible.

◗ Colour

Be careful with your choice of colour. Blue font on a yellow background or white font on a blue background works well, but avoid pale colours on a white background. Also remember the potential for colour blindness in your audience and avoid red and green combinations A point to note is that the colours that you see on your computer screen may well be altered by the quality of the projector and the strength of its bulb, so wherever possible, test out your presentation quality through the equipment ahead of time.

If you use a dark background for impact on your Power Point presentation, before printing out multiple copies of the presentation as handouts, consider the cost of the ink cartridges on your printer and perhaps change the colours

◗ Font size and spacing

To ensure the legibility of your presentation it is important to remember that you need to set out your slide clearly. Text is most legible with 1.5 pt spacing and with a limited amount of information which enables the font size to remain above 26pt in the body of the slide.

◗ Quantity of Information

Remember that you are often talking about very complex topics and sometimes this may be the first exposure that the learner has to this particular piece of information. In order to help the learner to engage with the material you are presenting try to put ensure that you only have one concept on each slide. Use bullet points instead of sentences in order to make each point clearly.

Also consider memory, in a one hour session learners will struggle to process more than four new concepts, so consider your content and your audience carefully when planning the talk.

◗ Texture and Action

If you chose to use the animation facilities of Power Point in order to develop concepts through a slow reveal of different points or to add movement to the slide, do use it sparingly and appropriately. Messages that rotate through 360 degrees, drop down from the top of the screen or fly in from left and right, distract the learner and detract from the educational impact of your session.

◗ What appeals?

The judicious use of humorous illustrations can improve the audience's recall and can therefore aid retention. However you must consider the relevance of visuals for different groups of learners. While you may like stick characters, cartoons, photographs of your family and your diving holiday in the Red Sea, are they appropriate to both the topic and the audience you need to take care not to trivialise your topic through misplaced or inappropriate use of clip art and imagery.

Conclusions

Power Point can be a very useful aid for learners, adding a further dimension to an educational; session which allows them opportunities to see different imagery and integrate new information with existing knowledge. However it is important to recognise that in itself Power Point is simply a tool, the effectiveness of which will depend on the degree of planning that has gone into designing the session. You need to have clearly defined your aims and objectives for the session and considered the function and content of each of the slides. The various design elements highlighted above need to be addressed and the whole session underpinned with educational theories and principles. It is vital to ensure we are not seduced by the glitz of a technologically enhanced presentation which preferences style over content. If we accept the premise that teachers take the main responsibility for what and how their students learn, Laurillard (2002), then we need to ensure that we create the conditions for our learners within which understanding is possible. A clear, well structured, theoretically informed Power Point presentation can be a great asset in helping us to achieve this aim.

Further Information

Laurillard, D. (2002)(2nd Edition). *Rethinking University Teaching: a conversational framework for the effective use of learning technologies.* London: Routledge / Falmer

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