

IN DEFENSE OF MS POWERPOINT

(Meenakshi Singh, Associate Professor, Faculty of Education, Banaras Hindu University,
Kamachha, Varanasi-221010, U.P., India, meenakshi77@gmail.com)

Abstract

Microsoft PowerPoint is undoubtedly the most popular application software in use today. Right from Corporate board meetings in Business houses to Seminars and Conferences, from primary schools to higher Education institutions, from medical colleges to Army briefings PowerPoint seems to be ubiquitous. Teachers with resources of appropriate infrastructure increasingly rely on multimedia presentations to enhance their teaching. Researches on teaching methods and effectiveness of lectures have however, dented this golden armour. Criticisms of PowerPoint are common place and phrases and idioms such as 'PowerPoint poisoning' and 'Death by PowerPoint' can be heard of. What are the misgivings and criticisms of lectures complemented with electronic presentations? What are the basics that must be taken care of to actually enhance a lecture and not kill it by ICT overdose? This paper presents some useful points to be kept in mind during lectures delivered using PowerPoint presentations and other similar electronic multimedia presentation software.

Key words: MS PowerPoint, effective lectures, multimedia, presentations

Introduction

Time spares none.... The very fact that the 'lecture method' of content delivery is still surviving, attributes certain merit to it. Had it not possessed certain undeniable advantages over the other prevailing methods, it would have ceased to exist. At University a large proportion of the time we spend in class is spent in lectures with the average being around 7 hours a week out of 10 hours a week in class (Mckay, 1978). This could be more depending on the subjects being taught and varying from teacher to teacher. Over the last two decades the simple 'lecture' has been evolving, thanks to the advent of user friendly application software like the MS PowerPoint.

Initially released for the Apple Macintosh in the year 1987 PowerPoint was then named "Presenter". Later in the year 1990 The Microsoft Corporation purchased the rights to the software and PowerPoint was officially launched on May 22, 1990, with the release of Windows 3.0. Several versions and nearly two decades later the MS PowerPoint 2007 (version 12) of the Office 2007 and the MS PowerPoint 2010 for Office 2010 are the most popular and latest versions of the software. PowerPoint has now become commonplace in the world of educational technology; even though, it was initially designed to facilitate visual demonstrations for group presentations in the business environment. Robert Gaskin's original proposal for the product written in 1984 the target market consisted of 'people who make presentations to others: managers, professionals, knowledge workers salespeople...' (Gaskins, 1984) Today, it has become the standard for anybody who wants to explain anything using a projector to anybody.

The first public laptop PowerPoint presentation took place in Paris on February 25, 1992, to Microsoft employees. By 1993 it was the market leader in PC presentation programmes. It now has an estimated 95% share of the presentation software market. (source: www.robertgaskins.com). This year can be regarded as the 25th year of PowerPoint considering the fact that the Microsoft Corporation celebrated the 20th anniversary of PowerPoint on 7th August 2007 at the Silicon Valley. Today it has more than 250 million users worldwide with nearly 30 million PowerPoint presentations

being made globally each day (BBC NEWS 2009). PowerPoint was recently listed by authors in *USA Today* as one of the top 25 inventions "...that changed our lives since 1982" (Acohidio, Hopkins, Graham, & Kessler, 2007). The authors boastfully claimed that, "lecturers from CEOs to sixth-graders display topic headings and charts with the click of a mouse" (PowerPoint section). Undoubtedly, PowerPoint has changed public speaking forever.

There is another side to this fairy tale as well. Criticisms of PowerPoint are common place and phrases and idioms such as 'PowerPoint poisoning' and 'Death by PowerPoint' can be heard of. Edward Tufte, a Yale Professor Emeritus, and the author of *The Visual Display of Quantitative Information* makes a deeper critique of PowerPoint in *The Cognitive Style of PowerPoint: Pitching Out Corrupts Within*. He puts forward the following critical points (Tufte 2006)

1. PowerPoint's low resolution is inadequate to display rich content.
2. PowerPoint's low resolution encourages bulleted outlines which dilute thought.
3. PowerPoint's deeply hierarchical and linear structure decontextualizes and hides information.
4. PowerPoint has a tendency to fragment narrative and data.
5. PowerPoint encourages a preoccupation with format, conspicuous decoration, and phluff rather than content.

Savoy, Proctor and Salvendy (2009) studied the retention of lecture information presented to students without the presence of PowerPoint (i.e., traditional lecture), auditory information in the presence of PowerPoint, and visual (i.e., graphic and alphanumeric) information displayed on PowerPoint slides. Data were collected from 62 students via quiz and questionnaire. Students retained 15% less information delivered verbally by the lecturer during PowerPoint presentations, but they preferred PowerPoint presentations over traditional presentations.

Kahraman, Çevik and Kodan (2011) in their study entitled "*Investigation of University Students' Attitude toward the Use of PowerPoint according To Some Variables*" aimed to investigate whether university students' attitudes toward the use of PowerPoint as a supporting teaching tool in the lectures change according to variables such as gender, academic units attended. It was found that there is no any statistically meaningful difference in the participants' attitude toward the use of PowerPoint in respect to gender, but there was significant difference in the participants' attitude toward the use of PowerPoint according to academic units attended.

What goes wrong?

"Good teachers do not merely 'deliver content' to students, but wake them up, throw them on their feet, and pull the chair away." (Brown, 2010)

A stimulating energetic lecture involving chalk board teaching with ample interactions does have this ability to some extent. Unfortunately, while making use of a power point based lecture the spontaneous use of other props and movements of the teacher gets restricted and all activity is confined to slide transitions and animations. The scope for interaction is also limited as the speaker is preoccupied with the slides and their sequence and the listeners have distractions in the form of visuals with text which they have to read along side. A bright flashy screen with animated text and visuals is like a magnet which holds the attention of the audiences. This grossly cuts down the scope for 'eye-contact' which steals away the 'soul' and 'spontaneity' of a 'talk'.

An extremely common yet annoying habit of speakers, that one comes across, is to turn back and look at the projected screen as if for assurance that the audience are seeing what is intended to

be shown. Adding insult to injury, the speaker then resorts to reading from the projected screen conveniently giving up all attempts of eye contact and nearly turning away from the audience ending the presentation as IRYRTWR 'I read you read together we read'.

Some tips to enhance a PowerPoint presentation

A powerful presentation invariably has two major requirements: first, making a good presentation and second, presenting it effectively, the later being more vital. Some tips based entirely on common sense, logic and the experiences that go along with being in use of this product for the last two decades, in addition to the review of researches undertaken in this area, have been presented below. Enhancing the presentation style

Giving Pre lecture handouts

An enthusiastic and responsive audience is a key ingredient of an effective interaction. During lectures involving multimedia presentations, the otherwise responsive students get busy taking down whatever is written on each slide and no assurance on part of the teacher can stop them from doing so. Besides researches advocate this practice as beneficial for students' learning. By taking notes, students deepen their understanding and relate lecture topics to current knowledge, which, in turn, may positively influence their academic performance (Brazeau, 2006; Castello and Monereo, 2005). The act of taking notes engages students more directly in the learning process and increases their ability to apply new material (Katayama and Crooks, 2003).

Giving Pre-lecture notes can help in this regard. When students have handouts of slides they need not copy from the screens. Depending upon the size of the class a teacher may either give Xerox copies of the notes or may even mail it to the students who may be asked to come to class with hard copies of the same. Kiewra (1985) found that students who reviewed full notes provided by the instructor achieved significantly higher scores on a delayed exam than those students who reviewed only their own notes.

Using the 'Pen'

The 'Control+ 'P' key' during a slide show instantly turns the mouse pointer to a pen. The speaker can then mark, encircle, strike through, underline or even write letters or cues on the screen. This adds spontaneity to a presentation. The students ready with hard copies of handouts can also make additional markings if they feel like it. Making use of this feature frees the teacher from unnecessary use of 'emphasis animations' to project or highlight important points.

The mouse pointer can be brought back to its default state by the 'Control+ 'A' key'. Further, these markings may be either preserved or discarded at the end of the presentation depending upon the user's choice.

Using the 'B' button

Most teachers rely upon the facial expressions of their students to gauge whether they are alert or puzzled, amused or bored. But in order to verify (with any degree of precision) that they are getting the point, the teacher needs to establish two-way communication—to ask them questions, to test their perceptions in a dialogue of some sort. This kind of verification requires directing questions about the subject matter to individual students (Zakrajsek, 1998).

How does one draw undivided attention away from the screen to oneself?

How to ensure that all eyes are resting upon you and not on the screen?

Pressing the 'B' alphabet key from the key board during a slide show turns the entire screen

black and automatically ends the magnetic effect it had on the audience, who divert their attention to the speaker. This thus provides an opportunity to the speaker to make eye-contact and proceed to interact by posing questions or initiating a discussion or by simply recapitulating all that has been spoken of that far. This also comes in handy for killing the monotony and generating vital stimulus variation.

The presentation can be reverted back to by pressing the 'W' alphabet key. The same effect can be had by pressing the '.' Full stop key for a blank screen and the ',' comma key for reverting back to the presentation.

Using the 'Use Presenter's Notes' option

The 'Slide show' tab on the M S PowerPoint ribbon has three command groups; 'Start slide Show', 'Set up' and 'Monitors'. The 'Monitors' command group has three features a 'Resolution' 'Show Presentation On' and a check box marked 'Use presenter View'. The 'Resolution' command enables us to choose an appropriate screen resolution during the slide show based on the requirements of the kind of display we want to make and thus by making amends to Tufte's criticism to some extent and also based on the compatibility of the projector or display speed and requirements of visual details. Whenever we make use of multiple monitors the 'Show Presentation On' option is enabled. It enables us to choose the monitor on which we wish to display the full screen presentation. The check box marked 'Use presenter View' is a feature that enables us to have different views for the audience and the presenter. The presenter can see the slides in a part of the screen and the entire notes that have been added for each slide in another part of the screen while the audience get to see the full screen slide show. This comes in handy for presenters as they can keep less text on the slides and write cues for their aid or entire notes on the 'notes for presenter area'.

Avoiding the hierarchical monotonous linear style

The 'hierarchical and linear structure' of PowerPoint presentations is yet another criticism levied by Tufte. The use of hyperlinks to navigate within a maze like assembly of sides and the insertion of MS Word documents, pdf (portable document format) files and images, video clips etc can go a long way in creating a presentation that is free from this monotony. The presenter should also be well prepared with good examples and anecdotes to consolidate and deepen the concepts that are being projected linearly. Hyperlinks and Action buttons add features that enable user to navigate through out the computer's internal files while still being anchored to the Presentation.

Respecting time, restricting the number of slides

Another fact that must be kept in mind during lecture through Power Point slides is the restriction on the number of slides and the available time. In case the slides have more text than graphics or images, the time required to comprehend them will definitely be more, and therefore the presenter must restrict the number of slides and also the amount of text written on each slide. The golden rule in this regard is the 6X6 rule. The best shot is to use not more than 6 lines in a slide and not more than 6 words or terms in each line. Whatever can be said or narrated easily need not be written in its full form on the slide instead only the most important points or cues should be written. The presentation slides are best used for images, pictures and graphics which need just a glance to comprehend and pages of narration to describe.

Avoiding or minimizing razzle dazzle

Beginners at the use of PowerPoint are overwhelmed by the razzle dazzle of animations and transitions that can be added to words and graphics in a presentation. As a result they tend to incorporate unnecessary 'bling' indiscriminately. An audience of young children may appreciate this effort enormously. However the relatively grownup learners do not appreciate such indiscriminate use of animations particularly when accompanied with sound effects. Researches in this area provide evidence that suggest that they have adverse effect on learning. Moreno & Mayer (2000) and Mayer (2001) found that irrelevant sounds or pictures in a lecture can reduce student comprehension. Mahar et al. (2009) reported that incrementally introducing information on PowerPoint slides via custom animation decreases student learning versus having all information shown on the slide at the same time. It is therefore advisable to make appropriate and judicious use of animation features.

Minding the color and the contrast :

The normally available colour schemes give us a choice from among 16,777, 216 different colours. It is quite natural to be swept away by such enormity. A word of caution in this regard has been put forth by Jones (2003), *“Utilise the visual and other media opportunities offered to enhance your presentation whenever possible but be careful to avoid excessive use of colour effects, animation effects, transition effects, sound effects, etc. Do not use more than two text colours in a presentation unless there are particular reasons for doing so. Standardize the positions of elements, colours used (keep to a minimum) and font styles within a presentation.”*

There are other studies that have shown that color is a factor in memory representation. Hanna and Remington (1996) opined that color, as a stimulus, is a part of memory representation. Similarly, Allen (1990) suggested that colors are encoded as a verbal representation as well as in the perceptual mode in the form of a visual image. Dwyer and Lamberski (1983) concluded that when color is central to the ideas and concepts being presented and the students pay attention, the use of color improves learning. But these studies by no means advocate the excessive use of color variety. One must also keep in mind the contrast of the font color with the background color.

Conclusion

PowerPoint is a tremendous application and most of the criticism it faces today is not because of its shortcomings but because of the shortcomings of the users. PowerPoint does not give bad presentations; people give bad presentations. Doumont, (2005) has categorically pointed

out that many of the problems associated with PowerPoint are typically more the presenter's fault than the software application itself.

In teaching and learning situations the use of PowerPoint should provide a more effective way of communicating information to students. Unfortunately, PowerPoint can often lead to teacher-centered, screen-centered, and technology-centered instruction (Lowenthal, 2005). When used thoughtfully, PowerPoint enables us to enhance our teaching sessions helping us remain structured and by reinforcing what we say and allowing the use of graphics and other multimedia to support different learning styles. Deciding when and where the different tools available might be used appropriately is the key to good teaching. As presenters we need to ask us “What do our learners

need to know?” and “how can my presentation help them accomplish it? It goes without saying that our own insight about our audience helps us determine whether we actually need a multimedia presentation at all. This also goes a long way in deciding the overall look and feel of the presentation.

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