

Effective audiovisual presentation: A critical appraisal of electronic presentation software and suggestions for its appropriate use in residency teaching

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Electronic presentation software (PowerPoint, Keynote) has replaced historical media (blackboard, overhead projector, photographic slides) as the de facto method of audiovisual communication in many areas of government, business and higher education. While the widespread adoption of presentation software in medical education has been generally accepted as natural progress, we contend that the efficiencies offered by this tool may come at a cost of excessive reliance on hierarchical strata, superficial analysis, distracting electronic effects and atrophy of oratory skills. In contrast, recognition of the strengths and limitations of presentation software and the inherent cognitive biases engendered by their organizational structure may promote their more effective use.

In order to address these concerns, we created an interactive workshop devoted to the effective use of information technology in audiovisual presentation and applied it in the contexts of medical faculty development, residency education and undergraduate medical education.

The main parts of this workshop are as follows:

1. Effective oratorical interaction with visual information;
2. Separation of process from product in creation of presentations;
3. Recognition of the cognitive style promoted by hierarchical presentation software (e.g., bullet lists);
4. Strategic use of colours, fonts and images; and
5. Avoidance of common technological pitfalls in large-group presentation.

Although experimental evidence documenting increased teaching effectiveness as a consequence of our intervention is lacking, quantitative and qualitative feedback suggests a high degree of participant satisfaction, and anecdotal experience suggests adoption of many of its components in varied medical education contexts.