

Exploring the appropriateness of using PowerPoint in nursing education

This article discusses whether PowerPoint is suitable for use in nursing education

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This article discusses the use of PowerPoint in nursing education. It argues that PowerPoint may not always be appropriate as a teaching and presentational tool, as it may fail to engage students. The article also argues that the software has become overused and both educators and students have become overly dependent on it. It is suggested that PowerPoint use becomes more limited and that educators and nurses find other ways in which to engage their audiences.

INTRODUCTION

PowerPoint presentation software has been embraced by the nursing profession, clinical educators and university teachers alike, as the universally appropriate teaching tool. This is at least a little surprising, as using it for teaching creates an educational environment that does not fit well with current educational philosophy.

Released in 1987, PowerPoint was developed from an earlier programme called Presenter. Since it is designed for use in the boardroom, it imposes its own dominance hierarchy. Using the programme the active presenter feeds information to a passive audience. This is what it is intended to do.

Selwyn (2007) correctly describes it as 'business oriented' rather than 'education oriented', designed as a 'linear mode of technology... based around the presentation and one-way distribution of information'.

It is possible to tinker with the format, and confident and technically accomplished lecturers can to an extent impose their personality on PowerPoint. However, by default the software likes to run from

BOX 1. KEY POINTS – ENSURING BEST USE OF POWERPOINT

Two suggestions to help educationalists and others free themselves from PowerPoint dependency:

- Set a limit on the number of sessions per teaching module or course that could be delivered using PowerPoint. This

would encourage the use of other teaching methods;

- Require that interview presentations for any post, clinical or educational, do not use PowerPoint. This might provoke some refreshing original thinking.

the starting slide to the last slide, full screen, and without interruption to the saved sequence.

THEORY-PRACTICE GAP IN NURSING

The existence of a 'theory practice' gap is a well-accepted principle in nursing. This is the idea that what nurses say they do and why – and what they actually do and why – are not always the same (Landers, 2000; Cook, 1991).

The ubiquitous nature of PowerPoint in clinical education suggests this theory-practice gap probably exists in the classroom as well as the ward. The teaching principles that nurse educators say they use and what they actually do also seem to differ.

There is a fundamental understanding in nurse education that students enjoy the teaching more and retain information better when taught interactively (Costa et al, 2007). An interactive approach is in line with contemporary educational and clinical philosophies.

The major influences in nurse education remain constructivist, in keeping with developmental models of practical learning (Feldman, 2003) and Bruner's complementary ideas on how reality is constructed and represented (Bruner, 1966; 1960). The reflective epistemology (theory of knowledge) of authors such as Schön (1983) and Gibbs (1988) has had a profound influence in helping the profession understand how expert practitioners work and how the reflexive process can be incorporated into education.

Therefore, the ideal teaching environment should be facilitative, to ensure learning takes place, and collaborative, to ensure that both teacher and student are engaged. Learning takes place 'in action', and is – or should be – a democratic process involving problem-solving and participation by both.

USING POWERPOINT IN TEACHING

PowerPoint is of limited use for learning. It does not naturally facilitate enquiry or activity; the prepared slide sequences are designed to close down rather than open up interaction. It is about delivery, not debate. A trip to the classroom can become like a trip to the cinema – everyone settles down in a darkened room and relaxes for the show.

Furthermore, the length of the show can be considerable. One relatively small and unscientific survey of presentations on the internet found that the average had 26 slides, which equates to one slide roughly every two minutes (Presentation Facts, 2008).

Edward Tufte, a long-time opponent of PowerPoint's use, claims that long sequences of slides cannot be assimilated and do not adapt to the lecturer's cognitive style. He argues that its stylish but bland templates are designed to remove any sign of personality and replace it with a sterile, corporate uniformity (Tufte, 2003).

Taylor (2007), in a humorous paper with a serious message, suggests that its overuse indicates an inability or unwillingness to teach, and that enriched – or in his terms, 'busy' – slideshows distract students from learning rather than help them learn.



The basic argument seems to be that PowerPoint is entirely appropriate for delivering presentations to halls full of delegates, but for engaging with a class of 30 students it is not so useful.

Student engagement

Proponents may underestimate how much PowerPoint's superficial intuitiveness and integration with Microsoft Office influences how it is likely to be used.

It is too easy to simply copy and paste text notes into slides. If one is unsure about how the slides should look, PowerPoint will provide a template. This simple way of loading large numbers of slides with text and PowerPoint's lack of a presenter-cueing system mean that neither teacher nor student knows which slide is coming next. This leads to the prospect of the teacher slavishly reading huge numbers of slides, which, in terms of look and feel, will resemble every other PowerPoint presentation, slide by slide, bullet point by bullet point, to a group of bored and alienated students. Indeed, Godin (2001) suggested using handwritten cue cards to prevent this occurring.

While the colours, graphic effects and slide transitions are entertaining at first, they can become boring with overuse. The student who yawningly asks 'Is this on the web?' before drifting off to sleep should perhaps not be blamed. They could not play a meaningful part in the 'presentation' if they stayed awake. Some students apparently do not attend at all.

Whether or not you blame PowerPoint for this depends on your point of view. Dr Allan Jones, a senior lecturer at the University of Dundee and editor-in-chief of *Biosciences Education* e-journal, who is a PowerPoint enthusiast, argues: 'It is evident from the widespread observations that courses not using PowerPoint have suffered similar declines in attendance to those that do use it' (Jones, 2003). However, this claim is not backed by any evidence in the article.

On the other hand, Morón-García (2006) reported both a perception and a reality of student absenteeism, although only in two cases, and those were where the lesson content was available on the web. Carlson (2005) cites Naomi Baron, a US linguistics professor, as saying PowerPoint is popular with professors because they can put slides online. But Baron is not sure that students

like PowerPoint. 'More troubling is that students are downloading the slides and notes and skipping the classes,' she says (Carlson, 2005).

Although Jones (2003) did not seem to agree that PowerPoint, or at least the practice of putting slideshows online, leads to students not attending classes, he suggests that: 'The most significant potential negative effect, especially where "complete" presentations are made available to students, is the danger of encouraging students to sit passively through the session since they may perceive that they have "got the notes",' (Jones, 2003). Or as Adams (2006) puts it: 'To observe a classroom with PowerPoint at its centre is often to watch a group of students with idle hands.'

Possible solutions

Jones (2003) suggested that the major teaching issue with PowerPoint – its linearity – can be remedied by using hyperlinks and bookmarks, and linking and embedding files.

This may be possible for technically adept people, but is it worth the effort? To give a PowerPoint presentation the flexibility of an acetate or whiteboard presentation would involve an enormous amount of work and would be effectively forcing it into a role for which it was never designed.

This argument also overlooks the fact that most PowerPoint users in education already use Microsoft Word. Compared with Word, PowerPoint allows very limited navigation. Using the advanced features of Word, it is possible to construct presentations in which a navigation menu remains on screen and to move freely backward and forward and pull in objects such as video as required, rather than have the direction and sequence of the session fixed.

However, most Word users are ignorant of these advanced capabilities. This poses the question: how likely is it they will find and use the advanced features of PowerPoint?

Suitability for nurses

To look for such remedies to PowerPoint's inadequacies as a teaching tool carries the assumption that the software itself is 'good' but that some slideshows may be 'bad' because they have too many slides and so on. It leads to the assumption that if these errors were corrected then PowerPoint would be good.

I would argue that the possibility has to be

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considered that PowerPoint in many clinical educational settings may be 'bad', no matter what is done with it, because it is fundamentally unsuitable.

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Many nurses complain that contemporary guidelines in clinical intervention are too rooted in protocols and procedures that oversimplify problems that, in reality, are complex, open to varying definitions and require a finely tuned, balanced approach. There are rarely 'right' answers.

I believe that PowerPoint is all about 'right answers' and simplification. Even if there is a pause for debate on slide 10, the class

BOX 2. POWERPOINT IN STUDENT NURSE PRESENTATIONS

- In nurse education, no-one could have escaped noticing the changed landscape of student presentation sessions.
- At one time, these were lively affairs in which one might expect to see physical evidence of real individual interests, such as collections of semi-precious stones, materials used in water-colouring or calligraphy demonstrations.
- Today's presentations are typically a series of bland PowerPoint displays, punctuated by points of interest when the version of PowerPoint on the classroom PC fails to match the student's presentation and IT support have to be called in.

can be sure that slide 11 will provide the right answer in a typically wordy sequence of bullet points flying in from the right or the left of the screen.

It is probably already too late to open a debate on how much the development of intervention strategies over recent years has been influenced by the use of PowerPoint in presentations by researchers and clinicians. It is almost impossible to imagine a time when people did not return from conferences, clinical update sessions and workshops clutching printed PowerPoint slides. It is equally impossible to imagine any educational setting, including clinical simulation suites and seminar rooms, not being PowerPoint equipped.

It is therefore quite conceivable that the software may be having an effect on the way the nursing profession thinks. Parker (2005) argues that 'it helps you make a case, but it also makes its own case: about how to organise information, how much information to organise, how to look at the world'.

If one is concerned that at least to some extent the medium may be the message, then professionals have a responsibility to say so. However, in a world where 'education is labelled "new", "different" and "better" as if it were washing-powder [and] ICT is assumed to be the panacea that is to enable all this' (Westera, 2005), it may be difficult to find the moral courage to do this. Anyone who refuses to use PowerPoint risks being treated at best as if they are odd and old-fashioned and at worst as some sort of pariah.

IMPLICATIONS FOR TEACHING PRACTICE

In any analysis, the first thing to accept is that a PowerPoint presentation is both more and less an automated version of an acetate-based overhead projector (OHP).

But, unlike acetate slides, PowerPoint slides cannot be previewed immediately before display, re-ordered or annotated during a presentation, or removed from the sequence.

Parker (2005) cites Nass as saying that PowerPoint 'lifts the floor, but lowers the ceiling'. This means that poor lecturers are less likely to give a bad lecture if they use PowerPoint, because it keeps them on track, provides the information and manages timing. However, inspirational teachers are restricted and limited by it. Nevertheless, this effect may be worthwhile. It reduces the risk from poor lecturers, and for inspirational teaching, while it is helpful, it is not essential. For the impact of PowerPoint overuse on student presentations, see Box 2.

CONCLUSION

There is a place in education for a linear, didactic approach to information-giving, in which complex ideas are simplified to sequences of bullet points, which PowerPoint does well. However, there is evidence that it is no more effective in this regard than acetate would be if used in the same way (Szabo and Hastings, 2000).

The premise here is that if unfashionable acetate OHPs were being used in the same way as PowerPoint is, there would be widespread concern about falling educational standards. There would possibly be concerns that educational theory, which rightly emphasises interactivity and collaboration with students, was being ignored and that debate in the classroom was being abandoned in favour of simple information-giving. For some advice on the use of Powerpoint, see Key Points box (p22).

It is probably too late. Perhaps education is now as deeply wedded to PowerPoint as the universal teaching tool as personal transportation is to the car. ■