

# ABA TECHSHOW<sup>®</sup> 2008

PRESENTED BY THE



LAW PRACTICE MANAGEMENT SECTION

MARKETING • MANAGEMENT • TECHNOLOGY • FINANCE

## Showtime at the Courthouse: A Demonstration of Courtroom Tech Tools

Presenters:  
Nils B. Jensen  
Paul Unger

**Conference:** March 13-15, 2008

**Expo:** March 13-14, 2008

**Hilton Chicago, Chicago, IL**

**[www.techshow.com](http://www.techshow.com)**

**Showtime at the Courthouse:  
A Demonstration of Courtroom Tech Tools**

*High Tech on a Low Budget*

**by Nils B. Jensen  
Crown Counsel, Victoria, British Columbia**

## ***Introduction***

Most courtrooms are not designed for high tech trials. What do you do if your case is assigned to a low tech courtroom, yet you want to project images, show electronic evidence and use a document camera? You convert the courtroom.

This paper shows you how, with a little effort and a little budget, you can conduct a high tech trial in a low tech courtroom. It describes the basic technology tools and some basic techniques that will allow you go high tech without breaking the bank.

This paper is intended to be a short guide to creating a do-it-yourself high tech courtroom. The emphasis is on a **short** guide – not exhaustive and hopefully not exhausting.

Even if you plan to hire a consultant rather than doing-it-yourself you still need to be aware of the basic tools – you need to know what's out there.

There is little doubt that courtroom tech tools assist most cases, criminal and civil. Tech tools make the steps in the trial more efficient. Opening, direct, cross and closings can generally be done more quickly and more effectively. When used appropriately tech tools will enhance the persuasiveness of your case – a litigator's ultimate goal.

There is also little doubt that that most criminal and civil files don't warrant hiring an outside expert. For these cases you'll need to be your own expert. To do that, you'll need the *will* and a little technical *know-how*. A little technical knowledge is usually enough to make you a dangerous techno adversary.

## ***The Basic Tools***

There are five basic courtroom tech tools:

1. a laptop
2. a projector
3. a document camera
4. a screen
5. Microsoft PowerPoint

If you are intimidated by #1 – the laptop – you may not be ready to do-it-yourself. Hire a consultant.

Some courts provide hardware tools – projector, document camera and a screen. However the court is not likely to provide an operator – which means you'll need to develop a working familiarity with the tools.

If the court does not supply the hardware tools you'll need to lease or purchase them.

If you plan to do a number of trials using technology, purchasing may be the most economic option – the price of projectors, document cameras and screens are quite affordable, and steadily becoming more affordable.

Below is a review of the five basic tools along with some factors to take into account when purchasing the hardware.

### **Laptop**

There is a dizzying array of laptops available – with so many permutations of memory and speed that you need a Ph.D. to be able to make apples to apples comparisons. Suffice it to say that most mid-range laptops are suitable – spend in the \$1,000 to \$2,000 range and you'll get all you need.

Look for memory in the range of 512 MB (MegaByte) or 1 GB (GigaByte) range. That will efficiently run the software needed for court presentations. The processor speed in the affordable range of laptops will also suffice.

Given the fast pace of change it's always a good idea to buy the largest memory and the fastest processor speed that your budget allows.

The laptop should include a CD/DVD drive and burner. This will give you the ability to quickly make copies for the court and the other side. If your evidence includes larger video files a CD alone may be too small to hold all the files.

You should also consider size and weight.

Size is important, especially if you are building your presentation on the laptop – a larger screen is preferable. There is an added advantage of a larger size: the keyboard is larger – smaller models come with smaller and harder to find keys. If you have large hands go for a large laptop.

Larger laptops mean more weight. Reducing weight generally means increasing the price. Ultraportable models weigh in under 2 kilograms (4.4 pounds), measured before weighty 'extras' such as a charger and extra batteries for long flights.

### **Projector**

As with most technology, projectors come in all sizes and shapes. Without getting too technical, a few of the key points to consider when purchasing are set out below.

## **Weight**

Consider a lighter model projector if you have to carry it to court often. If you have cooperative staff this may not be a worry. What you often gain in portability you may lose in brightness.

## **Brightness**

Units of brightness are measured in ANSI (American National Standard Institute) lumens. Generally, projectors run between 500 and 2000 lumens. The more lumens the brighter your presentation will be. Above 2000 lumens is considered high-performance and can get you into expensive territory.

Don't go below 1000 lumens. This is a minimum since your presentation will be done with the courtroom lights ON – to discourage napping.

## **Contrast**

The higher the contrast ratio, the greater the projector's ability to show subtle colour detail and operate in a well lit courtroom. This may become important when showing photographs. Look for contrast ratios over 500:1. A ratio over 1200:1 is considered high contrast giving you crisp, vibrant colours.

## **Resolution**

This refers to the clarity of the picture produced by your projector.

Resolution is usually quoted using two numbers, i.e. 800 x 600, where the first number is the number of pixels from side to side across the screen, and the second the number of pixels from top to bottom.

A pixel (a distorted shortening of *picture element*) is the most basic unit of an image – the dot. The more pixels the better – the more pixels the higher the price.

Resolution is also quoted in letters i.e. SVGA – Super Video Graphics Array or XGA – eXtended Graphic Array.

The resolution of your projector will be no better than your computer's resolution. Therefore it's best if the projector resolution matches your laptop screen resolution, which for newer models is XGA or 1024 x 768 and up.

## **Connectivity**

The projector should have the capacity to simultaneously connect to different sources, such as a laptop, a document camera and a DVD player. This allows you to switch between sources. Most new models have this capability. Without multiple connections ports you need to change cables every time you change sources, which can be disruptive.

### **Fan Noise**

Older and less expensive projectors have fans that make a lot of noise which can interfere with the court recording system and worse: the tier of fact's hearing. Get a projector that's quiet – this may be more costly but worth it. It'll avoid the court recorder having to tell you to move the projector to the far and inconvenient side of the court room.

### **Price**

Projectors range from \$500 to \$5,000 and beyond. Beware, at the lower end of the price scale image quality generally suffers.

## **Document Camera**

A document camera is simply a video camera mounted on a stand over a platform. The document camera is used to show documents, hard copy photographs and objects. The camera captures the image of the item so it can be projected onto a screen – a new-fangled overhead projector. These devices are also known as visual presenters, visualisers and Elmos, a manufacturer's name. Below are a factors to consider when purchasing.

### **Resolution**

This is a key factor to get the best image quality – the higher the resolution the better the image. However the 'viewable' resolution is determined by the projector's resolution even if the document camera's resolution is higher.

### **Autofocus**

This is a handy feature so you don't have to re-focus when you zoom the camera in or out.

### **Portability**

If you will be lugging the document camera around yourself, weight and ease of dismantling are considerations. Some new models are less than 2 kilograms and designed specifically for ease of transportation.

### **Price**

Models seen most often in court are in the \$1,500 to \$3,000 range. Highly portable models with high resolution but without a lot of features start at about \$650.

## **Screen**

The tri-pod home movie screens that were a staple of rec room life in the 60's and 70's are still available. They are inexpensive and give you an old-fashioned ambiance. However for a courtroom you should consider newer, professional models. Although more expensive, they are more portable, more easily set up and will give you a better quality image. Below are factors to consider if purchasing.

**Size**

The size you choose will depend on the distance from the screen to the viewer – larger courtrooms will of necessity require larger screens.

**Image quality**

The quality of the image depends on the quality of the screen material. Different screen fabrics refract light differently. Manufacturer's use two criteria to differentiate screen quality: "gain" and "viewing angle".

Gain measures the reflectivity of the fabric – a gain of one being equivalent to an accepted industry standard. A gain of 1.5 will therefore give you 50% better light reflection than the standard. When comparing screens choose the one with the higher gain.

Viewing angle measures the angle of offset a viewer can be and still have the same quality image as a head-on view. Some screens will diffuse light accurately between a broader range of viewing angles than others. Getting the best viewing angle is important if the jury and judge are on opposite sides of the courtroom.

**Screen colour**

Screen colour, white to grey, determines the contrast. A darker screen will improve the contrast in the ambient light conditions of a courtroom.

**Price**

Rec room style screens are under \$130 but they tend to be too small for most courtrooms. Larger, more suitable professional models range from \$250 to \$600.

**Microsoft PowerPoint**

You will need a presentation software program to show your submissions and exhibits if they are in digital format. Software is not needed for a document camera.

While there are many presentation software programs, some specifically developed for lawyers, the industry standard is Microsoft's PowerPoint. It's intuitive, easy to use and readily available.

Perhaps the easiest way to learn PowerPoint is to have a knowledgeable colleague take an hour and walk you through the basic steps to create a presentation. Once you've seen the basics you can get started and learn more as you go.

There are also many good teach-yourself texts available from your local library or online sellers. Set out below are a few useful texts for the PowerPoint novice.

*Microsoft PowerPoint 2007 Quicksteps* by Carole Matthews, McGraw Hill 2007.

*PowerPoint Step by Step* (available for PowerPoint 2003 and 2007 versions) by Online Training Solutions Inc.(2003); and by Joyce Cox and Joan Preppernau (2007), Microsoft Press 2004 and 2007.

*PowerPoint for Dummies* (available for PowerPoint 2003 and 2007 versions) by Doug Lowe, Wiley Publishing, Inc. 2003 and 2007.

*Absolute Beginner's Guide to Microsoft Office PowerPoint 2003* by Read Gilgen, Que Publishing 2004.

NITA has several specialty PowerPoint texts:

*PowerPoint 2002 for Litigators*

*Basic PowerPoint Exhibits*

*PowerPoint 2003: 50 Great Tips for Better, Easier Slides*

## ***The do-it-yourself high tech courtroom***

Proper court set-up is crucial.

Because most courtrooms were designed and built before the advent of laptops and many before television, the do-it-yourself retrofit presents challenges.

You will need to scope out your courtroom in advance to determine the best placement for the hardware tools and resolve other potential issues.

Below are some important points to consider.

### **Screen placement**

Start the set-up with the screen and work from there. Placement of the other tech tools will of necessity be determined by where you put the screen.

The screen will be the main focal point. Everyone – counsel, the judge and the jury must be able to see it. In a criminal trial this will include the accused.

### **Screen Alternative**

If your exhibits do not need to be projected onto a large screen, for instance a video on your laptop, you may want to consider using a monitor.

The monitor must be LCD (Liquid Crystal Display) or plasma – a conventional TV will not work with the laptop. You may need multiple monitors depending on the court layout.

### **Equipment stands**

You may need a separate stand or table for the projector and document camera. In many courtrooms the counsel desks are fully occupied and not conveniently located to act as an equipment stand.

### **Projector placement**

The location of the projector is dictated by the screen. It is preferable to have the projector directly in front and in the middle of the screen. If that is not possible the shape of the image will be distorted. For how to correct this distortion see Projector – keystone correction below.

Fan noise may be a consideration when lining up the screen and the projector. If the fan emits too much noise the court recording system may be affected.

### **Laptop placement**

The laptop should be within easy reach of counsel. Counsel will need to load disks or call up specific exhibits in a PowerPoint so it should be conveniently located.

### **Document camera placement**

In most instances, the document camera should be close to where counsel stands when questioning the witness. This allows counsel to control what the witness and the trier of fact see. However there will be instances where it's better to have it next to the witness. For instance, for a professional witness who has possession of documents, it may be more efficient to have the document camera next to the witness.

### **Laptop – projector connection**

The laptop is normally connected directly to the projector using VGA (Video Graphics Adapter) computer cable. The cable that comes with the projector is usually short – under 2 metres (6.6 feet). Longer cables are available at most computer stores for under \$70.

It is also possible to connect the laptop through the document camera rather than directly to the projector.

### **Projector – document camera connection**

The connection between these also requires a computer VGA cable. Check the projector-document distance in advance.

### **Switching between sources**

The two sources of projected images are the laptop and the document camera. When you plan to use both you will need to be able to switch the projector from one to the other.

Normally the laptop and document camera are connected directly to the projector by their own separate computer cable. When this configuration is used, switching between sources – the laptop and document camera – is done at the projector. Newer projectors have a remote control with a switching function.

If the laptop connection is routed through the document camera, switching sources between the laptop and the document camera is done at the document camera.

### **Projector – keystone correction**

When a projector is angled upwards (or sideways) at a screen the image on the screen is no longer square. It's in the shape of a keystone – the central wedge-like stone at the top of an arch that keeps the arch from falling.

Using the projector's keystone function, you can 're-square' the image. You may have to do this every time the projector is rebooted.

Newer projectors automatically compensate for the keystone effect, both horizontally and vertically.

### **Extension cords and power bars**

In older courtrooms electrical outlets are at a premium. You should have extensions cords and power bars at the ready – be careful not to overload the circuits.

### **Trip hazards and water jugs**

When all the wires and cables are in place, you should consider which ones could cause embarrassing trips. Pulling over a projector, while perhaps funny in a Mr. Bean movie, may diminish your reputation in the eyes of the jury.

Potentially hazardous cables and extension cords should be taped down or placed under a reusable line protector. Line protectors are inexpensive and well worth it for peace of mind, not to mention avoiding potential lawsuits.

Keep your eyes on water jugs too. If spilled into a laptop or other electric device serious harm can occur to you and the device.

## ***Using the Basic Tools***

With the four basic hardware tools and the PowerPoint software, you'll be ready to easily and effortlessly use technology in opening and closing statements, presenting exhibits and making legal argument. But don't go overboard – every trial doesn't need every step to be techno. Pick and choose judiciously.

## **Opening**

An effective opening tells the story of your case. Its effectiveness can be enhanced by using technology to project images using either PowerPoint slides or the document camera. The images should aid the opening – not displace the persuasive of your words. The power of the technology lies in telling the story with visual aids.

The visual aids are not a substitute for a well-structured opening – they merely make it easier to understand because the trier of fact will hear *and* see.

If visuals don't clearly enhance the story, don't use them.

Here are some points to consider when opening with tech tools.

### **Use only admissible visuals**

Don't use exhibits or graphics that may later be ruled inadmissible or prejudicial – otherwise prepare yourself for objections or worse a mistrial if the jury has been irrevocably prejudiced. Without giving away all your opening pyro-techniques, you should seek pre-opening rulings for visuals that may be controversial.

### **Be selective**

Use a minimum number of images to avoid tedium setting in. While you may plan to tender a hundred photographs in evidence, they don't all need to be shown in the opening

### **Text – little but LARGE**

Use as little text as possible. The trier of fact will read your text – if there's too much you'll lose your audience to reading. Keep text to the bare minimum – use photographs and graphics wherever possible.

Use headlines which you then embellish with oratory. For instance, a headline might say 'Dangerous Intersection' at which point you show a photograph and make the point in your own words.

Text size is important – use LARGE font. Test it out in the courtroom to ensure that the jurors in the back row can read it.

### **Slide Colour**

PowerPoint allows you to select any background colour you can imagine for your slides. You should consider a dark background with a light coloured text, for instance white text on dark blue. This generally will make text stand out and be more readable in a well lit courtroom.

### **Diagrams and flowcharts**

Where your opening introduces complicated relationships, fraudulent flow of assets, chain of events etc. consider using a simple diagram to tell the story. The diagram can be shown during the trial and in closing to reinforce the point.

If you are adventurous add animation to show flow and movement.

### **Take your time – don't waste theirs**

If the slides were worth producing, give the jury the time to read the text and savour the images.

The corollary: don't waste the jury's time with irrelevant images. Keep photographs and graphics at an "enjoyable level". Remember the last time your neighbour asked you to watch their travel slides – how many did it take before you were screaming (to yourself of course) get me out of here! Don't induce that same feeling in the jury.

### **Use a slide advancer or wireless presenter**

Your goal in opening using visual aids is to naturally weave your words with the PowerPoint images. For instance as you are saying "there was limited visibility at the poorly designed intersection" you pause and a photo illustrating your point appears on the screen.

Your flow should not be disrupted by constantly walking over to your laptop or giving hand signals to an assistant to advance the slides. This will have an adverse affect on the jury's attention. To avoid this, use a handheld wireless slide advancer to change the images.

The wireless advancer sends radio signals of your wishes to a receiver plugged into a USB port on your laptop. The advancer does NOT need to be pointed at the receiver like the channel changers of old. Hold the device casually by your side as you advance the slides. It should all appear natural and seamless. You may need to practice being naturally casual.

Choose an advancer that incorporates a laser pointer. This allows you to draw specific details on the image to the jury's attentions.

### **Don't talk to the screen**

Don't let the technology interfere with establishing a relationship with the trier of fact. If you are constantly looking at the screen yourself the jury will get to know your back.

You will, of course, need to make sure you have the right slide up on the screen as you talk – it's embarrassing to be talking about the dangerous intersection when showing a straight stretch of road. It will certainly make the jury smile, if not laugh.

Use your laptop's screen to check that you have the right slide up. There is a setting which allows the slides to be on the projector screen and laptop screen simultaneously.

Position the laptop in your field of vision but out of the jury's sight. Out of the corner of your eye casually check the laptop screen as you change the slides.

### **Hard copy of the presentation**

If the opening is made to a judge alone consider providing a hard copy of the presentation in advance. If you print off the presentation as a handout – 3 slides per page – the judge can follow the opening more easily and make notes alongside each slide.

### **For pauses use blank slides or screen cut-off**

If you plan to make dramatic pauses or change direction in the opening you may want to redirect the jury's attention away from the screen.

To do this, you can use a blank slide inserted at the appropriate break point. This will direct the jury's attention away from the screen and back onto you and provide the opportunity to re-focus the jury's attention on the next topic.

Some wireless presenters have a screen cut-off button that can be used to the same effect. The option merely turns the screen blank without affecting the projector, or your place in the slides.

## **Exhibit Presentation**

Presenting exhibits using the basic software and hardware allows everyone in the courtroom to be on the same page. It engages the trier of fact much more directly than a witness testifying about an exhibit few can see. When a large image of the exhibit is projected onto a large screen using the PowerPoint software or directly from the document camera, everyone in the courtroom knows what's being talked about.

Even before you consider *how* to present your electronic evidence and illustrative aids, you will need to consider *if* you can present them. Considerations of admissibility are outside the scope of this paper and will depend largely on the applicable rules of evidence and rules of court. For an excellent review of the potential legal issues see *Effective Use of Courtroom Technology: A Judge's Guide to Pretrial and Trial*, by the Federal Judicial Center. Online at:

[http://www.fjc.gov/public/pdf.nsf/lookup/cttech00.pdf/\\$file/cttech00.pdf](http://www.fjc.gov/public/pdf.nsf/lookup/cttech00.pdf/$file/cttech00.pdf)

Consider the following points when using tech tools to present evidence.

### **The ‘kill switch’**

There is none in the do-it-yourself courtroom. With that in mind, care needs to be taken to ensure evidence is admissible *before* it’s flashed onto a large screen for the jury to see. Where objections are anticipated or you’ve been alerted to impending objections, seek the appropriate ruling or agreement first.

### **Keep the record in mind**

When you are building your PowerPoint presentation of photographs, documents etc. keep in mind that when the slide is projected you will need to make it clear on the record what slide is being referred to. Therefore, each slide should have a unique number. In PowerPoint this can be done by setting the Master Slide to automatically number each slide.

If there are many photos or documents, consider having separate thematic slide presentations. They should be given file names accordingly. For instance you might have a presentation called “Accident Scene Photographs” and another entitled “Defendant’s Injuries”. Within each presentation the slides are given unique numbers.

### **Marking slides ahead of time**

If you know you want to draw a witness’ attention to a specific part of a photograph or document, you should consider marking it on the slide ahead of time. PowerPoint allows a circle or other shape to be drawn on top of the photo or document. You then merely need to have the witness comment on the marked area.

You should consider having a clean photograph or document followed by one that’s been pre-marked.

The alternative is to point with a laser pointer. This approach will require you to describe for the record, exactly where you are pointing.

### **Two laser pointers**

One for the witness, the other for you.

The witness will likely be some distance from the screen – so pointing with a finger may be ambiguous. Ambiguity is removed with a laser pointer.

### **Changing Slides**

A slide advancer is useful to change slides only if you intend to show the slides sequentially one after the other.

If you intend to jump around in the slide presentation you merely need to type in the new slide number on your laptop and hit ‘enter’. In preparation for moving non-sequentially from slide to slide it is useful to have an index of slides with a witness correlation showing which witness needs to see which slides.

While you can change slides with a remote mouse they are not terribly easy to use and require more physical manipulation than a simple typing stroke.

### **Inserting Photographs into a PowerPoint presentation**

There are two main ways.

In the PowerPoint program use the "Insert" feature and put the photos in one at a time.

A quicker, simpler way is to insert selected photographs using Microsoft Office Picture Manager found under Microsoft Office Tools. This program will insert photographs as a group into a PowerPoint presentation. It also allows the photos to be resized and arranged before insertion.

### **Hard copies**

The main object of using technology is to increase persuasiveness, not necessarily to cut down on paper.

It is often very helpful for the trier of fact to have a hard copy of the slides. They can mark their own copies and flip back and forth as required. Many judges and juries prefer to hold onto something they can make notes on and look at during breaks in the action. A hard copy can also act as a reference tool in the jury room.

### **Entering exhibits**

You will need to enter the electronic exhibits that are shown in court.

Keeping this in mind, the images should be shown from a disk that is capable of being submitted as an exhibit. Therefore, you should not show images from your hard drive or a memory stick that you want to keep.

The format of the disk should be such that the jury can easily access them during their deliberations. In other words, no arcane formats that are not compatible with the jury's computer software.

You should alert the court before hand what programs will need to be available on the jury room computer to permit a proper replay.

You should use disks that can not be re-written to prevent alterations. If you are using a medium that can be changed, make sure the files are write-protected so no changes can be made after they are entered as exhibits.

### **Original format**

It is always a good idea to keep the original electronic formats on hand and in a non-alterable form in the event that an issue of 'doctoring' is raised. Because it is easy to make copies of electronic formatted exhibits there is a risk that the quality

or content of the image may change in the copying process – deliberately or inadvertently. Having the originals on hand may head off objections.

### **Time and focus**

The trier of fact may need some time to view the exhibit displayed on the screen – give them that time.

Allow the jury to focus on one exhibit at a time without other distractions. Don't let the witness move on to another point or exhibit while the trier of fact is still studying the displayed image.

Below are points to remember, specific to using a document camera.

### **A ruler and clean hands**

The document camera can take a quarter and blow it up to many feet wide. To ensure the trier of fact has the correct size context, place a ruler next to the object, this will be particularly useful for smaller objects.

When using your finger to point under the video camera (as opposed to pointing at the screen), remember the finger will be enlarged many times. Keep it clean or use a pen.

### **Practice working with exhibits on the platform**

Manoeuvring objects or documents into position on the platform under the video camera may be spatially challenging. When you look at the screen the right becomes the left and vis versa. You'll need to practice so you don't confuse your audience or induce motion sickness.

Similarly, the zoom in and out feature needs practice. You may want to consider putting removable tape on the platform as a guide for placing documents.

If you intend to show a book, consider photocopying the page first. Getting a book to lay flat and still is often a challenge.

### **Photographs – use PowerPoint where possible**

While photographs can be shown using a document camera, quality suffers.

The photo may not be perfectly flat, it may not fully fit onto the platform and lighting may distort colours. It's better to show photographs using PowerPoint.

### **Show all first – then zoom in**

When showing a document on the document camera, show the entire document first to orient the trier of fact. Having done that you can zoom in to enlarge a particular area. This will keep the jury from wondering which document it was, or if there was a slight of hand.

## **Legal Argument**

Using PowerPoint in legal argument is not for everyone, nor every argument.

Slides can be used effectively in a legal argument by combining text and exhibits side by side. Listing evidence can also assist – for instance if a timeline is important showing it on a large screen while making the legal points can be effective

The judge should have a hard copy of the presentation in handout format – 3 slides per page – in advance.

Don't write out your full argument on the slides, nor should you read out the slides verbatim, unless it's a specific case law quote.

Use headlines that can be spoken to one at a time. Keep the text to a minimum on each slide – no more than five points per slide.

Consider animation to bring up one point at a time. If you have provided a hard copy in advance, the judge can easily anticipate what's coming next.

There is a distinct downside to using a preset slide show for a legal argument. It reduces spontaneity. It may be difficult to adjust where a judge's questions take you in a direction you had not anticipated.

## **Closing**

The points made in the "Opening" section above apply equally to closings. There are few additional things to consider.

### **Showing electronic exhibits**

In the closing you can pick and choose which exhibits you will use to make your point. If you have submitted your photographs or documents in PowerPoint format it will be an easy to cut and paste them into a closing PowerPoint presentation.

You should however make reference in your closing slides to their origin. For instance in the slide footer you might add: "Exhibit 3 – Presentation 2 – slide 14". This will confirm that you are not introducing any new exhibits into the fray.

It is also important to maintain the integrity of the electronic exhibits you import into your closing. You should not distort or otherwise edit electronic exhibits.

### **Resizing electronic exhibits**

Enlarging documents to focus on a particular passage can be done easily by resizing the document on the slide. As with the document camera, it is a good idea to show the original sized slide before you enlarge the text.

### **Adding graphics or text to the electronic exhibits**

You may want to mark the slides you cut and pasted from the trial exhibits into your closing PowerPoint. You can add a line, circle or text box etc. – PowerPoint provides endless options. This is very effective, but should not be unfair, prejudicial or amount to you giving evidence.

PowerPoint allows you to use freeform lines, arrows etc. for drawing over a photo or map. So for instance, if the route of travel is important, it can be drawn on the map in accordance with the evidence of the witnesses. If the goal is to show how the witnesses differ in their evidence, using a separate coloured line for each witness will enhance your point.

Specific parts of documents can be highlighted using a frame or text box.

### ***Conclusion***

While there are quite a few hoops to go through, the positive impact of a turning your low tech courtroom into a high tech venue is worth the effort.

Final words: before launching into your first tech trial, practice until you are fully conversant with the technology.

# Showtime at the Courthouse

## *The Proper Use of Technology in the Courtroom*

**Paul J. Unger, Esq. ([punger@hmuconsulting.com](mailto:punger@hmuconsulting.com))**

Copyright © 2008 by Paul J. Unger

A client recently visited my office and said "I've got a real dog on my hands and I need every advantage that I can get to help us win. I think using PowerPoint will help us win." While there may be some truth to that, always remember that jurors are smart – you can't use technology as a smoke screen or to make a bad case look good. Using technology in a bad case may have the effect of placing a magnifying glass on it – everyone may see all the fleas! So don't fall into that trap of spending lots of money if your case is really bad. Instead look at dedicating resources to resolve the case, as opposed to creating more division.

Now, if your case just has some weaknesses, as most cases do, then that is a different story! Proper use of technology can help illuminate your strongest arguments and engage the jury in ways that were not possible 10 years ago.

Follow these guidelines when using technology in your presentations so you can present your best case -- and most prepared case.

### **Attorneys Prefer to Talk and Listen – Jurors Prefer Visuals**

The first step in fixing a problem is recognizing that there is a problem. The problem is that attorneys communicate and learn differently than the general population. As such, we need to modify our style of communication to fit the needs of our audience.

According to a recent study<sup>1</sup>, attorneys underutilize visual communication and over utilize verbal communication as compared to the general population. 387 attorneys and 1657 non-attorneys were surveyed over 3 years to determine how they fit into one of three learning/ communication styles: visual (seeing), auditory (speaking and hearing) or kinesthetic (feeling). According to this study, only 18% of non-attorneys learn best by hearing information, as compared to nearly 29% of attorneys. Furthermore, 61% of the general population prefers to learn from visual information, while only 46.9% of attorneys prefer to communicate with visual information.

---

<sup>1</sup> Animators at Law 2007 Study

## Don't Overuse PowerPoint

On the other hand, don't over utilize PowerPoint slides or graphics. *No Technology Replaces the Vividness of One's Own Imagination!* You do not need a graphic or slide for every single thought or idea. Otherwise, you risk watering down your message and overloading the jury with information that should be spoken. Always ask yourself, does this slide advance the ball, or is it better left said.

## Don't Misuse PowerPoint

PowerPoint's misuse is a nationwide epidemic. Critics of PowerPoint, like Edward Tufte, go to the extreme and say that the PowerPoint program itself facilitates the making of bad presentations. Moreover, PowerPoint stupefies our culture by encouraging fragmented thinking through bullet points and linear slides, further diminishing our attention span, and feeding us heaping spoonfuls of graphic sugar. I disagree. After all, PowerPoint is just a software program – a tool that humans use or misuse. When a seamstress sews a crooked seam, should we blame the sewing machine? If a presenter has poor content, bad graphics, or does not communicate clearly, should we blame PowerPoint?

If used Properly, PowerPoint is extremely effective in delivering information to our fast-paced culture. We do live in a fast-paced, and sometimes, shallow culture. We sometimes want to be spoon-fed the answer - we have little to no attention span and we want to be entertained. We do want anecdotal sound bites - we have become stupefied to some extent. Okay. Now that we know our audience, lets tailor our presentation to our audience! Tufte cites reasons to support his opinion, but he neglects to identify the true evil which has nothing at all to do with PowerPoint. What Tufte is really doing is engaging in a highly academic discussion about how the media world is eroding our intelligence. He is arguing that PowerPoint furthers our culture toward content-free language such as sound bites and slogans. The truth is that PowerPoint is not the problem – people are the problem. PowerPoint slide presentations are not spontaneously created by software ... people create PowerPoint slide presentations! PowerPoint is merely a reflection of the culture that created it ... a product of its era. So what are your choices? Use PowerPoint or "heaping spoonfuls of graphic sugar" and keep their attention or not use it and potentially lose your audience? It's like a candidate running for president refusing to debate on television because he/she believes television is eroding our minds! Get with the program ... PowerPoint is an excellent tool if it is used properly.

## **Speak with Passion, Not PowerPoint**

If your goal is to persuade and motivate, give a speech! You should scale back on the use of PowerPoint or other computer graphics. If your goal is to persuade and educate the jury, then it is okay to use PowerPoint IF you use it correctly. One author recently asked “Could you imagine if Martin Luther King, Jr. gave his infamous ‘I have a Dream’ speech using PowerPoint!?” This critic implied it would have been bad. I agree to a some extent. If Martin Luther King, Jr. used PowerPoint as 95% of lawyers do (standard bullet lists and over-used cheesy backgrounds), it would have been terrible. However, had PowerPoint been used to simply show a few select photographs in the background depicting discrimination, hate, love and freedom, his famous speech would have been just as good or better. It certainly wouldn’t have made it worse! You have to evaluate presentations on a case-by-case basis.

## **Use Plain English in your Speech and Graphics**

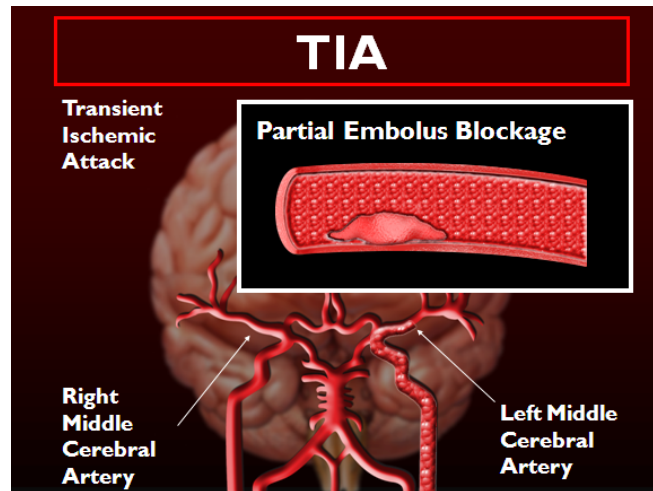
First, use plain English that everyone understands. This is still the biggest mistake that lawyers make. Instead of saying “This litigation is before us today because the defendant failed exercise ordinary care in his relationship as a physician with the plaintiff, and such failure was the proximate cause of the plaintiff’s damages, “ simply say “A doctor must do what other doctors would do in a similar situation.” Use words like “Accountability” and “Responsibility” throughout the presentation. By the time the jury is introduced to those horribly confusing jury instructions, they will better understand all the legal jargon.

## **Tutor the Jury in Voir Dire and Opening Statement**

Jurors are pretty street smart, but when it comes to science and numbers, you better provide some tutoring up front! Less than half of the jury box will have math skills above performing basic one-step calculations. Create a visual glossary to explain terms that will be used in the trial.

Don't make the mistake of assuming that your expert will educate the jury for you. Create a road map for the jury ahead of time so they can spend more of their time understanding and analyzing your expert's position than learning a new complex vocabulary.

This is a very simple example of just one slide used to explain a TIA (Transient Ischemic Attack), or mini-stroke.



We used about a dozen similar slides to explain other important medical terminology.

Note that we did not create a text-based slide to define TIA or its symptoms. We could have, but felt that the visual, accompanied by good storytelling was much more effective. We showed the slide and then verbally informed the jury that a transient ischemic attack (TIA) is a stroke that lasts only a few minutes – that is what "transient" means. It occurs when the blood supply to part of the brain is briefly interrupted – that is what ischemic means ... "decrease or interruption in blood flow." Further, that TIA symptoms, which usually occur suddenly, are similar to those of stroke but do not last as long. Finally that symptoms can include: numbness or weakness in the face, arm, or leg, especially on one side of the body; confusion or difficulty in talking or understanding speech; trouble seeing in one or both eyes; and difficulty with walking, dizziness, or loss of balance and coordination.

### **Have Strong Content in your Spoken Words, Slides and Written Materials**

PowerPoint cannot mask the fact that your content or case stinks. Infamous PowerPoint-Basher, Edward R. Tufte correctly states in his essay *The Cognitive Style of PowerPoint*<sup>2</sup> that it is easy to let PowerPoint shorten evidence and thought, organize complex information in a single-path model template, break up narrative and data into minimal fragments, decorate and fluff a slide show with format, not content; and promote an attitude of commercialism that turns everything into a sales pitch. All of these "evils" diminish content. Tufte strongly believes that PowerPoint promotes or actively facilitates the production of "lightweight" presentations. This is where I disagree with Tufte. I have personally witnessed thousands of good and bad

<sup>2</sup> Edward R. Tufte, *The Cognitive Style of PowerPoint* (2004), p. 4.

presentations ... half didn't use PowerPoint and the other half did. Content and clear delivery dictated the success of those presentations – not PowerPoint.

## **Don't Dilute your Message with too many Bullet Point Lists**

Tufte, in his essay *Cognitive Style of PowerPoint*, claims that the PowerPoint programs coerces slide makers into using brief phrases in the form of bullet lists. Tufte claims that bullet lists make us stupid and lazy. Specifically, bullet lists are (1) too generic and (2) leaves critical information out.

First, the notion that Bill Gates is coercing us into using using bullet point lists is ludicrous. People who are forced into using the program lack understanding of the program and how to use its features. PowerPoint is nothing more than a blank piece of digital paper waiting to drawn , written and colored. No one is forcing anyone to use bullet point lists.

While I agree that bullet point lists are generally overused and too verbose, I also disagree with the notion that they shouldn't be used because they leave critical information out. Bullet lists in PowerPoint are incomplete by design! Bullet lists, used properly, are nothing more than headings or titles about a main thought or idea. The substance behind the bullet point is delivered verbally and/or in written materials (or trial exhibits). The key to using bullet points effectively is to NOT OVERUSE THEM.

Tufte claims that since text or data on paper is more complete, that people should follow along on paper and pitch PowerPoint in the garbage completely. Again, I must disagree. Tufte's criticism on this point is probably based on seeing countless bad presentations that contain slide after slide of bullet points.

First, PowerPoint was not designed to replace the information or data contained in printed literature. Second, PowerPoint slides and bullet lists should, in most situations, be incomplete. The audience still depends on a verbal presentation and written materials (although, admittedly I have seen some speakers simply handout their PowerPoint slides as the written materials – I strongly don't recommend it). Third, we use PowerPoint slides most of the time to introduce, simplify, and reinforce information. There is nothing wrong with that! It's kind of like when we use flash-cards (using index cards) to help us study for a test ... only PowerPoint is much prettier!

## Focus on Clear Delivery

### Steps to Create a Successful Presentation Supplemented by PowerPoint

1. Develop excellent content and handout materials
2. Practice the CLEAR delivery of that content
3. Prepare your PowerPoint slides based on what you need in 1 and 2
4. Practice, Practice, Practice with technology (PowerPoint &/or Sanction/Verdical)

### Steps to Create a Bad Presentation Supplemented by PowerPoint

1. Prepare your PowerPoint slides
2. Speak from your PowerPoint slides

PowerPoint can fragment the presentation of thoughts and data *if you let it*. Heck, any visual aid can fragment a presentation *if you don't know how to transition smoothly*. This is why you should first write the content of your speech (or content outline). The second thing to do is focus on practicing its clear delivery. The last step should be to create your PowerPoint slides *based on demands from the content and delivery*.

While PowerPoint can fragment thoughts if you let it, the bottom line is that the author of the PowerPoint makes the decisions about content and delivery. PowerPoint is an incredibly flexible program. Its only limitations are (1) the creativity of its users/presenters, and (2) the failure to understand how to use the program effectively. For instance, Tufte in his essay (see footnote 2) often claims that PowerPoint is “low-resolution” and therefore cannot display as much information as paper. Therefore, its content will always be inferior to paper. This is just plain wrong. You can scan a high-resolution image, whether it is text on paper, data on paper, an illustration or a photograph and display it at that same high-resolution ... only BIGGER ... often times on a 10-20 ft. screen<sup>3</sup>. My point is this: Using your communication skills, creativity and knowledge of PowerPoint, you can easily overcome the problem of a fragmented presentation.

## Know When to use Trial Presentation Programs (such as Sanction, Verdical, Visionary, or Trial Director) instead of PowerPoint

PowerPoint bashers are totally correct when they claim that PowerPoint cannot manage and display large numbers of images, documents and video. PowerPoint is very linear and was never designed to store, manage, retrieve and display lots of images, document and video. It wasn't designed to organize and display all the exhibits in a civil or criminal

---

<sup>3</sup> Displaying an entire screen full of text, as Tufte suggests, is not recommended. That would be idiotic. Utilize written materials or exhibits for recitations of full text.

trial. It was designed to replace film-based slide shows with an enhanced computer graphics-based slide show.

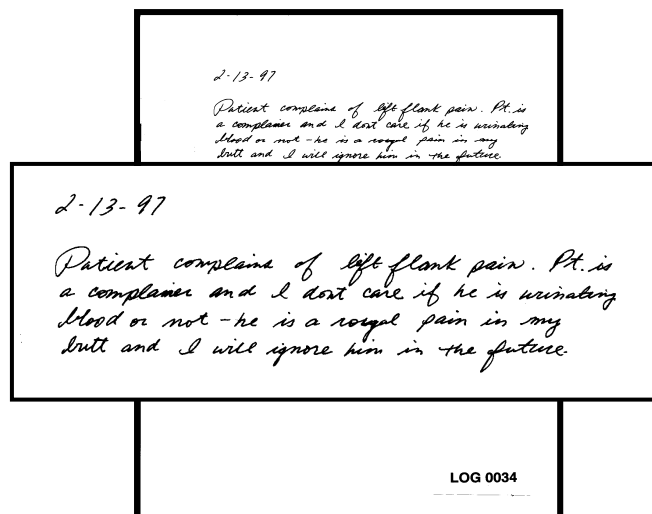
If you need to store, manage, retrieve and display lots of images, document and video, you need to invest in a trial presentation database program. If you are presenting a rehearsed linear slideshow such as in your opening statement or closing argument, use PowerPoint. Many times, you use both. It depends on your style and your comfort level.

What exactly is a trial presentation database program? Imagine having the ability to display to a jury any document, illustration, photograph or video deposition clip within seconds. Also imagine having volumes of documents on your computer organized to help you prepare for trial. This is what trial presentation software is all about.

Trial presentation software is particularly good for:

- Organizing discovery
- Displaying documents
- Playing back video
- Video clipping for impeachment
- Displaying photographs
- Adding annotations to images
- Creating and showing timelines
- Displaying bullet-point lists

**Example - Instant Retrieval of Documents:** In a trial presentation database, by typing the Exhibit # or Bates Number, one can instantly display that document on a large screen. For instance, type "LOG 0034" and the image will appear. Select an area to magnify key sections of the document at a moment's notice in the courtroom. If you wanted to create a call-out (zoom) in a document in PowerPoint and highlight text, it would take 2 separate programs and about 10 minutes (if you know what your doing). Using a trial presentation program, you can do it in 2 seconds.



**Example – Instant Retrieval of Photographs:** By typing the Exhibit number or image ID, you can instantly retrieve an endless number of photographs and magnify or annotate them.



**Example – Instant Retrieval of Video for Impeachment or Playback:** In a trial presentation database, you can simply type in the video name, page and line number to play video to impeach a witness.



12th.OCT.04 14:56:49

01:28:04.1

57:16 You shot Brent in the bedroom of your home,  
57:17 correct?  
57:18 A. Yes.  
57:19 Q. That's a true statement?  
57:20 A. Yes.

Example – Instant Retrieval of PowerPoint Slideshows: By typing the name of the PowerPoint slide show or other designated ID, you can retrieve and play PowerPoint slides or presentations at a moment's notice from within the trial presentation database. In other words, you use it as your control panel to retrieve and display all your exhibits.

Evidence that Defendant did <u>not</u> present in trial:	
	<i>Presented?</i>
	<i>Yes    No</i>
1/10/99 Letter to Mr. Lott	<input type="checkbox"/> <input checked="" type="checkbox"/>
3/1/99 Video of Jones trip	<input type="checkbox"/> <input checked="" type="checkbox"/>
7/14/99 Report by OSHA	<input type="checkbox"/> <input checked="" type="checkbox"/>
3/1/01 Supplemental Report by OSHA	<input type="checkbox"/> <input checked="" type="checkbox"/>

## **If the Slide is a Distraction, you are Missing the “Point”!**

The whole purpose of PowerPoint is to make a point – not a distraction. Avoid the over-use of distracting animation, sound effects and cheesy backgrounds. This is what gives PowerPoint a bad name! Animations and bad flashy backdrops can be very distracting. This obviously diminishes your presentation and your credibility. This doesn't mean that your presentation shouldn't look like a million bucks. Hire an artist or consultant to create an original background that is professional looking and one that no one else has seen. Pick one or two effects in PowerPoint to bring in text and graphics and stick with just those effects. I recommend the “fade” effect. This effect is very professional, tasteful and is not at all distracting.

## **Design, Color and Layout is Important**

Design conservatively and with professionalism. Most of the time you should use darker backgrounds (such as dark blue, green, etc.) and high-contrasting color text (such as white, yellow, etc.). A white background is okay makes the text harder to read, especially if you have more than one slide. Also remember to be color-blind friendly. One in ten of us have problems interpreting color. Avoid the combined use of red-green, green-yellow, and blue-yellow.

## **Does Color Matter?**

Yes, but only in the sense that the presentation must appear professional. However, in the grand scheme of things, our real-life experience, backed up by focus group research, tells us that so long as it is professional in appearance and easy to read/see (admittedly, a very subjective standard), jurors don't give a hill of beans if the slide has a green background, a blue background or a black background. Furthermore, our research has shown that color used in a PowerPoint slideshow in the context of a trial does not affect memory retention. Jurors pay more attention to the content (merits of the case) and delivery than the aesthetics of a PowerPoint presentation. The failure to use PowerPoint or some other visual memory-reinforcing aid may affect memory retention, but color generally doesn't matter.

The exception to this is when you deviate from a color scheme. Say you use white text on a blue background in a 20 slide presentation. Then you decide to use yellow text on a blue background for on slide 10. That will indeed have a positive effect on memory retention. However, it could easily be argued that the same effect could be accomplished by changing the font or underlining.

## **Use Fonts that are Easy to Read**

Avoid the use of Courier and Times New Roman fonts. Instead use fonts like Calibri, Tahoma, Arial and Helvetica. These fonts are easier to read from longer distances and the “nose-bleed” seats.

## **Hire Professionals when Appropriate**

Don't bite off more than you can chew, especially on a big case. When the case justifies the expense, hire a professional artist and a professional consultant to put your presentation together. Us lawyers tend to believe that we can do it all. Think again. Not only do most of us lack the talent of a professional artist & consultant, but if we tried to do their work at their level, we wouldn't have time to practice law. I am reminded of what one of my early mentors taught me long ago. Early in my career, I tried to do everything – practice law, rehab old houses, fix the plumbing, build computers, etc. Frustrated with me at the time, my mentor asked me if I wanted to practice law or play with computers. I quickly got his point. Ironically enough, I now play with computers.

## **Give the Audience Extra Space on your Slides – Avoid Clutter!**

Avoid information overload. Your slides and graphics should not be too cluttered. Try to limit bullet lists to 3-4 per slide with no more than 10-12 words on a single slide. Don't obsess over this. Of course there are exceptions to every rule. For example, if you want to display a statute or a jury instruction, how are you going to limit that slide to 10 words? You can't! If you can adhere to these general rules or goals 90% of the time, you will be in great shape.

## **Mix it Up the Media!**

Remember to use white boards, chalk boards, easels and enlarged pictures from time to time. There are multiple reasons for this. First, a jury can become bored with PowerPoint and a movie screen just as easy as they can with a chalk-board. We know from the television industry that changing the frequency of angle-shots within the same visual scene improves memory recognition. Count the number of angle changes within the same visual scene in a sitcom from the 60s versus a sitcom (or reality shows) created today. This teaches us that people are easily bored. So mix up the media. The second major reason for not relying on PowerPoint 100% of the time is that sometimes you want an illustration, timeline or photographs sitting on an easel for a long period of time so the jury can look at it for clarification or other reasons. If you have a blow-up, you can do that and also show PowerPoint slides or images through Sanction.

## **Don't Read or Use PowerPoint as an "Outline"**

Many people wrongly believe that it is appropriate to read PowerPoint slides or use it as an outline. I respectfully submit to these people that they have been led down the wrong road. There is nothing wrong with using a slide here and there to remind you of an important topic. However, there is a big difference between that and creating slides with outline numbering and long lists. Don't do it. It is lazy, grossly ineffective and painful to watch as an observer. Your message gets lost in all the needless slides and text.

## **Backup, Backup, Backup!**

In smaller dollar cases that cannot justify the expense of a trial presentation consultant, the biggest mistake that I see is failing to bring a backup computer, external USB hard drive or projector. When things go wrong, as they sometimes do, you must have backup equipment. Good rule of thumb – bring 2 of everything.

## **Someone Else Should Run the Presentation**

Running the technology in the courtroom and trying to be a trial lawyer is asking for trouble. Whether it be a paralegal or a consultant that you hire, whatever you do, don't run the presentation yourself. Being in the trenches of high-tech trials on a daily basis, I can honestly say that at least one potential disaster occurs each month. These issues should be invisible to the lawyers, jurors and judge! Lawyers have enough to worry about trying to hit 90-95% of the important issues in the case. The last thing that you need is to worry about a failing hard drive or replacing a bulb in your LCD projector. Delegate these worries to someone else!

## **Get Approval from the Court in Advance**

Exercise professionalism and get permission from the court in advance. You clearly do not have to expose your entire game plan. Simply tell the court at the appropriate time that you may want to display some evidence through the computer and a big screen. Ask if this will be okay.

## **Treat the Court Staff and Courtroom with Respect**

Would you walk into the judge's private office and start rearranging his/her furniture? Would you set up a 10 ft movie screen in his/her private office? Heck no, you wouldn't! Not unless you had a death wish. So don't do it in the courtroom without first making friends and consulting with the judge, bailiff, court reporter, court clerk, or others that use that courtroom as his/her office on a daily basis. How would you like it if someone just walked in and started rearranging your office?!

## Laptop versus Desktop Computers

Desktop computers are not made to be schlepped between courtrooms and hotel rooms every night. Laptops are made to be mobile – Desktops are not. Invest in a state-of-the-art laptop computer.

## Sound in the Courtroom

Do not rely on standard laptop computer speakers to adequately amplify sound especially in large courtrooms. Visit the courtroom and test your speakers. I recommend the use of powered Altec Lansing speaker or a large PA speaker and amplifier in most trials.

## Remote Mice

It is strongly recommended that you invest in a non-infrared based mouse that has a reception rating of at least 50 feet. This will cut back on extra wires hanging all over the place and will give you the ability to advance slides from anywhere in the courtroom. Logitech makes a fantastic remote mouse with a built-in laser pointer and timer for approximately \$60 that will fit your needs (Logitech Cordless Presenter USB Laser Pointer - LCD Timer 2.4GHZ - 931307-0403 - \$56 on [www.buy.com](http://www.buy.com)).



## Portable Video Presenters (ELMO-type devices)

It never hurts to have a portable video presenter for surprise documents that haven't been scanned. I have never had to use one since I use trial presentation software (Sanction/Verdical), but it is something to consider for the right situation. Check out the AverVision line of products (<http://www.aver.com/products>). The average street price is about \$1000-\$2000.



## Projectors

There are many good projectors on the market today. I have a strong preference for NEC and Panasonic because of their strong performance, warranty and service record. I recommend a projector with a rating of 3000-4000 ANSI lumens. NEC makes a great 3200 ANSI lumens projector for \$3,500 (MT1065). Panasonic makes a 3000 lumens projector for \$2,000 (PT-LB30U). If you don't have a huge need for a projector other than occasional trials, you should consider renting a quality projector for about \$1,000 per week. Whatever you do, be sure that you have the phone number of a local projector vendor who can bring you a projector fairly quickly in the event that your projector unexpectedly dies in the courtroom.

## Big Screen versus Monitors All Over the Place

Another common mistake is wasting money on individual monitors for jurors and/or other people in the courtroom. In technology-unfriendly courtrooms, it is sometimes necessary to place *a few* monitors in key areas (witness stand, judge, opposing counsel, etc.), but most of the time a single large 7-10 ft movie screen is more than adequate for

everyone. Don't complicate matters and spend unnecessary money on extra monitors unless it is absolutely required. On a related note, it is a colossal waste of money for courts to purchase individual monitors for jurors when the displayed image can be seen on a single large screen. Individual monitors for jurors also diminish attention from you as a presenter. Simply put, courts who get snookered into buying individual monitors for jurors are getting ripped off!

## **It's Never too Early to Get Training**

Lawyers are text-book procrastinators. Look, you cannot wait until one month before trial to become proficient with a software program that is going to either make or break you in the courtroom! There are fantastic training programs available for programs like Sanction/Verdical and Trial Director. Get your training out of the way at four to six months before your trial and think about using a professional consultant to hold your hand through your first trial.

## **Three Guiding Principles for Using Technology in the Courtroom:**

- (1) Have something meaningful to present;
- (2) Forget what you learned in law school and say it like a human being; and
- (3) No technology in the world is going to help you with the Rules 1 and 2!

*Paul J. Unger, Esq (punger@hmuconsulting.com) is an attorney and nationwide trial presentation consultant for Henley, March & Unger Consulting, Inc. based in Columbus, Ohio.*

*Tell me and I will forget  
Show me and I will remember  
Involve me and I will understand*

*- Confucius hack (but a wise hack)*