

## AUDIO VISUAL PREPARATION

In developing graphics for your class, whether adapting your existing materials or developing new graphics, keep these guidelines in mind.

### Document Camera

Also known as the overhead projector or visual presenter.

Overhead transparencies do not work well with this camera as they produce glare. Use regular paper either in light blue, light gray or ivory. White paper can also be used. Some white paper will cause glare on the screen as well.

In some locations, a small white board can be placed under the visual presenter camera. This allows you to face the students and watch the graphics monitor more easily. Or you can use white paper and write under the camera.

The visual presenter can also be used for showing printed materials – such as book or magazine pages, photographs or 3-D objects. It enables you to zoom in on smaller features. An example would be an artwork or bugs.

Other tips from Digital Bridges, A Teacher's Guide to Videoconferencing include:

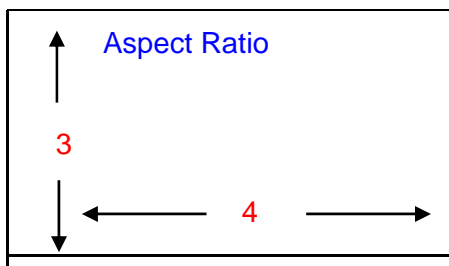
- Preparing overheads in advance or make slides of notes using presentation software
- Stacking overheads in order and place them by the document camera
- Focusing and arranging documents prior to the videoconference to facilitate smooth transitions between documents
- Having books open to pages that will be displayed
- Placing materials for demonstrations nearby and using the document camera to show each step of the demonstration
- Using the document camera as a slide projector by placing slides on the camera table and turning on the backlight
- Placing paper on the document camera and writing on it as a whiteboard or chalkboard
- Using a black felt tip pen and write in large letters

Source: <http://www.netc.org/digitalbridges/teachersguide/>

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### Preparing PowerPoint

In order to properly select or prepare visual material for a class, it is important to understand the design and layout requirements of video images. The aspect ratio of the television monitor is three to four. This means the picture is always three units high to four units wide.



Reformatting of your transparencies is recommended in order that they fit the screen.

The paper copy should print in landscape format, the 7" x 9" inch center of an 8 ½ by 11 inch sheet formatted horizontally.

- Keep it simple.
- Font Size: 40-52 pt for headings, 28-32 for text
- Use sans serif fonts -- Helvetica, Arial, and Tahoma.
- You may wish to use bold face as it is easier to read the text.
- Avoid Italic – difficult to read

- Avoid using all upper case letters except for the title. It tends to be easier to read text when only the first letter is capitalized.
- Use no more than three styles of text: one for the title, one for the copy and one if needed for stressing important items.
- Try not to highlight more than 10% of the words using techniques such as boxing, underlining, color or shading.
- Limit the number of text lines on a PPT slide to 6.
- Don't overdo the number of bullet points on a slide either.

### Color Combinations

PowerPoint provides several template patterns that you can select from with contrasting colors. In general, here are some background and color rules:

- Avoid patterned or textured backgrounds.
- Reminder – some people may be colorblind – avoid red and green
- Colors that clash when used together - orange and blue, red and blue
- If using dark background – dark blue/navy/dark purple – use white or yellow for text
- If using light background – ivory/tan/light grey – use dark blue, black, dark brown or dark purple for text.

### **Data charts**

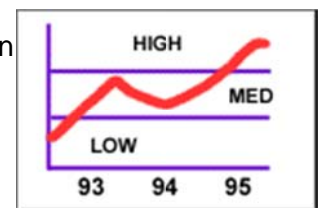
In using data charts or spread sheets, provide handouts in addition to showing the PPT slide.

Here are a few tips to keep in mind:

- Pie charts – use to show percentages, limit to 4-6 slices
- Vertical bar charts – use to show changes over time – such as year to year, limit the number to 6-8.
- Horizontal bar charts – use to compare quantities such as comparing wheat yields among different regions in a county.
- Line charts – use to indicate trends. Example is a weight chart or growth chart in a child.
- Tables – use for side by side comparisons of data.

Here are a few more tips on data charts from the *University of Minnesota ITV website*:

- Don't try to graph all data from a table in one chart. Select a subset that illustrates one point you want to make.
- Use horizontal rather than vertical labels for easier reading.
- Label bars, lines, and other data directly. Keys and legends are hard to read on a monitor.
- Keep "chart junk" such as tick marks, grids, labels, and decorations to a minimum. Emphasize the data, not the design.
- Use a dull color such as gray for tick marks, axes, and grids so these less important elements will not detract from the data.
- Divide the axis into units that are multiples of two, five, or ten for easier interpretation.
- Maintain consistent units of measurement on the axis from chart to chart. For example, don't switch from thousands to millions of dollars in a series of related charts.
- Begin the axes at zero or show a break in the axis to indicate a non-zero baseline when making comparisons. (Retrieved from the World Wide Web on 8/28/02, <http://umrtv.cee.umn.edu/UMTIV/mat.htm>)



### **White Boards**

Some classrooms may have a white board mounted on the wall for use for other classes. For videoconferencing, it may not be the best method because you will be writing with your back to the students and the primary camera will be focused on the board and not on you. You will have greater difficulty watching the monitor, so you may need a room operator to keep your work readable. You need to write with thick lines,

and you probably can't display as much written material as you might in a traditional classroom. If there are other options such as writing on a visual presenter, we suggest using that.