HOW TO MAKE A GREAT POSTER

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Making a great poster can be fun and is certainly a challenge! Here are some ideas about how to get the most attention for your efforts.

I. A GREAT POSTER IS...

Readable,
Readability is a measure of how easily the ideas flow from one item to the next. Text that has lots of grammatical problems, complex or passive sentence structure, and misspellings is "hard to read."

Legible,
If a text is legible, it can be deciphered. For example, an old book may not be legible if the paper has corroded or the lettering has faded. A common error in poster presentations is use of fonts that are too small to be read from 6-10 feet away, a typical distance for reading a poster.

Well organized, and
Spatial organization makes the difference between reaching 95% rather than just 5% of your audience: time spent hunting for the next idea or piece of data is time taken away from thinking about the science.

Succint.
Studies show that you have only 11 seconds to grab and retain your audience's attention so make the punchline prominant and brief. Most of your audience is going to absorb only the punchline. Those who are especially interested will seek you out anyway and chat with you at length, so you can expand then.

II. MAKING A POSTER: OVERVIEW

At St. Mary's, most students lay out their poster as a single PowerPoint slide and print it out on a large-format color printer. To begin:

Decide what the main message is,
Keep it short and sweet and make this your title! Use the active voice (i.e., avoid "ing" on the ends of verbs) and avoid the verb "to be" whenever possible.

ELIMINATE all extraneous material,
Given that the average poster gazer spends less than 10 minutes on your work and you have 11 seconds to trap your subject before they move on, only show data that adds to your central message. You do need a Title, Authors, Mentor's Name, Abstract, Introduction, Results, and Conclusions. Keep Methods to a minimum: most people will not read them anyway. Summarize!

III. POSTER LAYOUT: arranging poster elements and text.

People approach new information in a known spatial sequence: we track vertically from center to top to bottom, and horizontally from left to right. This means that you should put the most important message in the center top position followed by the top left, top right, bottom left, and finish in the bottom right corner. That's why the poster title should be your punch line because, in that position, the title and your name will be seen in the first 11 seconds that a person looks at the poster.

The overall format of a good poster is dictated by the way we assimilate information. For example, you would never put your first panel on the right and ask your reader to proceed to the left because we are not trained to read that way. Newspaper format, two vertical columns that are arranged so that you read the left one first and then the right one, is highly "readable" since the reader does not spend time figuring out which panel to read next. A left to right horizontal rows arrangement works too but is not as common. You can easily walk around any meeting and find lots of variation.

Space is important in a poster: without it, your reader has no visual pauses to think. Books leave space on the margins and by having chapters. Posters that are crammed with information are tiring to read and are seldom read in their entirety. Omit all extraneous text or visual distractions, including borders between related data and text, so the reader can assimilate your ideas easily.

Size of poster elements or the fonts in each element can serve to emphasize the main points. For example, making your subheadings in all capitals and two font sizes larger than the rest of the text on the same panel will draw the reader's eye first, and so be emphasized. The use of multiple fonts in a poster can distract from the science.

You will lend the most power to your words if you spatially arrange the text in each panel of your poster following the same principles used for the poster layout as a whole. A common street sign reads "go children slow". Because the word "children" is in capitals larger than the other words and is in the center of the image, you read "Children, go slow" even though that is not the actual spatial arrangement of the words in the sign. This sign is powerful, succinct, and highly readable.

IV. FONT CHOICE:

Basic font choice

Choose a basic font whose "e's" and "a's" stay open at all sizes and that is supported by your printer. Verdana, Helvetica, Tahoma and Arial are good choices that are supported by the printer.

Font size

Font sizes need to be big to be effective. A good rule is to stand back from your own poster: if you, who are familiar with the material, cannot easily read it from 6 feet away, your audience will certainly not be able to. Use at least 28 point for posters. Something between 28 and 48 is generally good for text and

subheadings. You can use even larger font sizes for your title, 72 point for example. If you include references, they can be in a smaller font because most people won't read them.

V. COLOR

Ways to add color,
You can add color in the background, text, and figures. Use color to make your points, but don't overdo it.

Contrast,
Proper contrast will reduce eye strain and make the poster more legible and interesting visually. Again, be careful that the color does not outclass the visual impact of your data: jarring contrast is hard on the eyes and can distract the reader from your data.

VI. PRACTICAL MATTERS

It takes time to make a great poster. That last bit of data you rush around to get at the last moment will go completely unnoticed if your poster is messy and disorganized i.e. illegible and unreadable.

We have large format poster printer (Epson 9600) used to make posters.
It is VERY expensive to operate and run, but we will only charge SMP students for the paper and ink in the poster-$10/foot. At Staples the same job would run $100-150 for 3 feet! So, you should print it here at the College. Go to the College Bookstore and purchase a voucher for 3 feet of poster printing- make sure you tell them it is for the Schaefer Hall printer. This will cost $30.

You should lay out your poster as a single PowerPoint slide and save your work on a CD or jump drive IN PC FORMAT (Mac does not work with this printer). It's fine to lay out your poster on a Mac, but then open it on a PC, check everything, and save it again from the PC.

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YOU MUST FOLLOW THESE STEPS!!!!

Your poster will be 34" wide and 44" high. There is a template on the SMP Blackboard site with these dimensions. Use this template or set up your own document with these dimensions as explained below - DO NOT use any other dimensions.

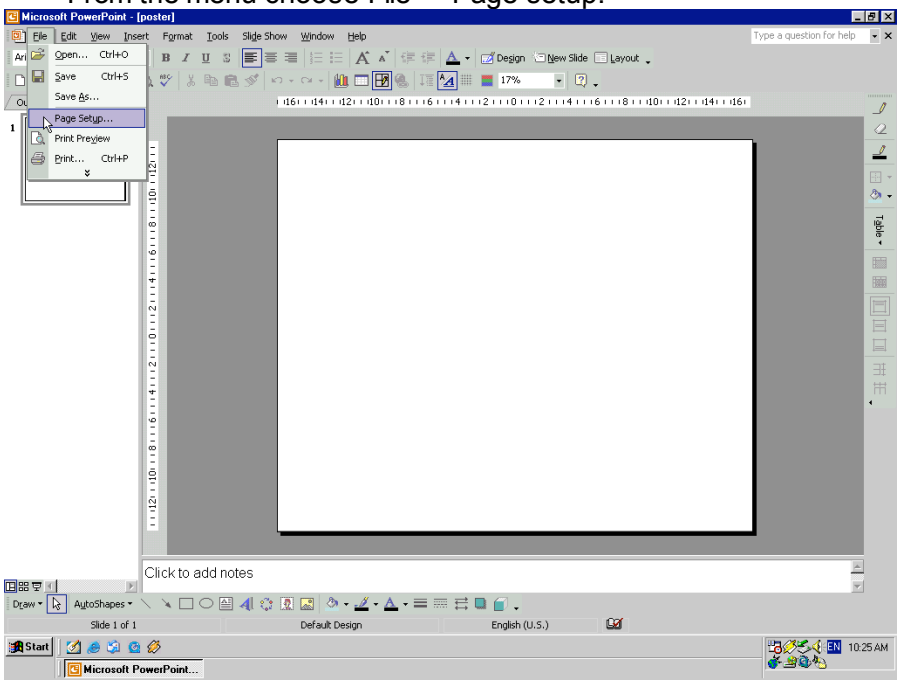
Save your work frequently and make sure that the PowerPoint is actually on the CD or jump drive that you are going to bring when you are scheduled to print. Open the file on a PC and scrutinize it VERY CAREFULLY.

Here are the steps for successful poster making. You must be VERY careful because when you load you poster onto the computer attached to the printer, there will be no time to correct formatting mistakes, and once the printing starts, there's no going back

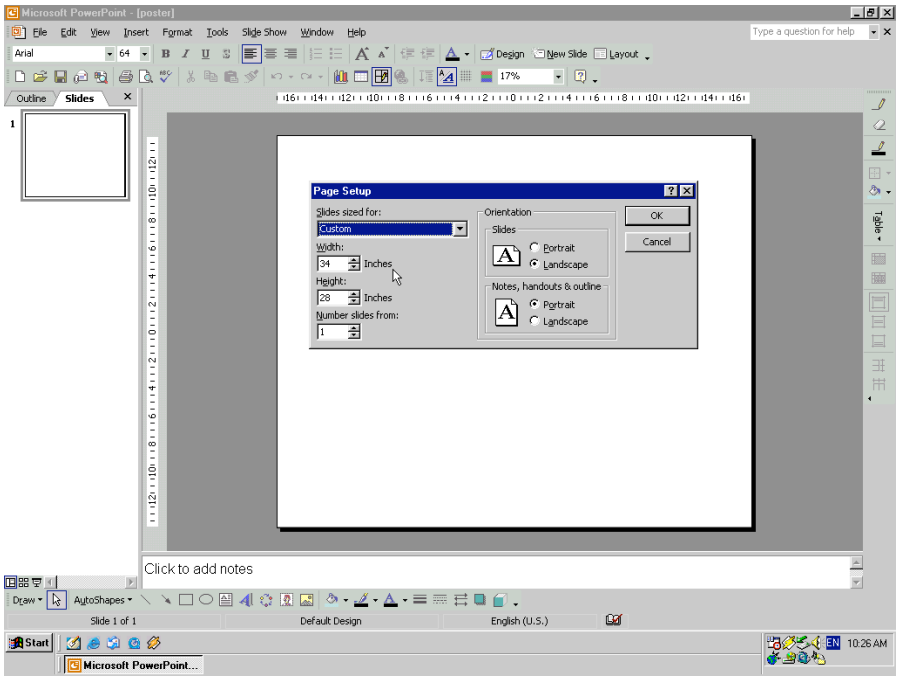
HOW TO LAY OUT A POSTER WITH POWERPOINT

1. To start, either
   a. Open a blank slide in PowerPoint and set the dimensions according to steps 2 & 3 below. or
   b. Open the template "Poster Example – Template" from the SMP BlackBoard page. The dimensions will be correct. Skip to step 4.

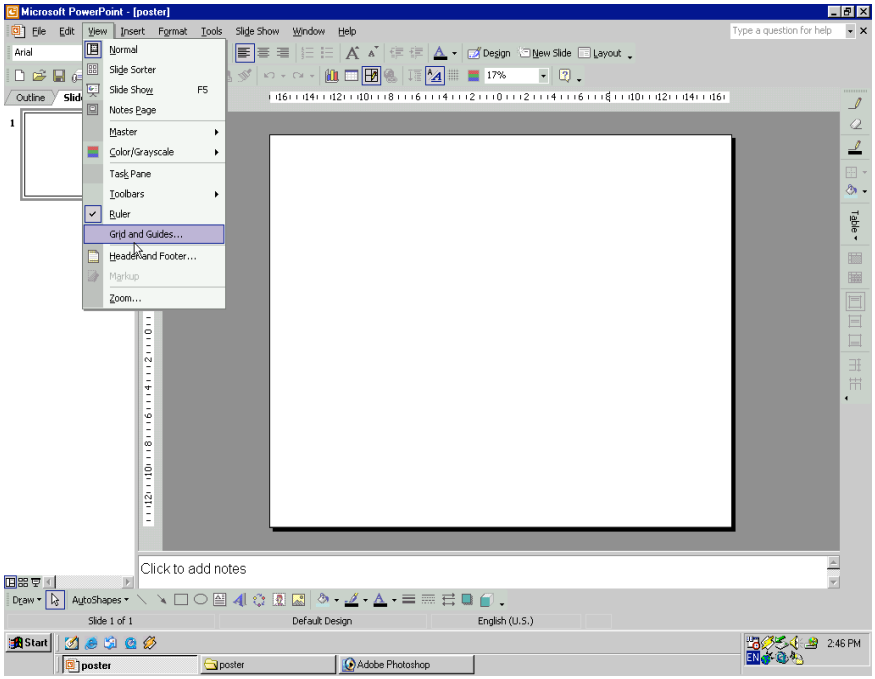
2. From the menu choose File -> Page setup.



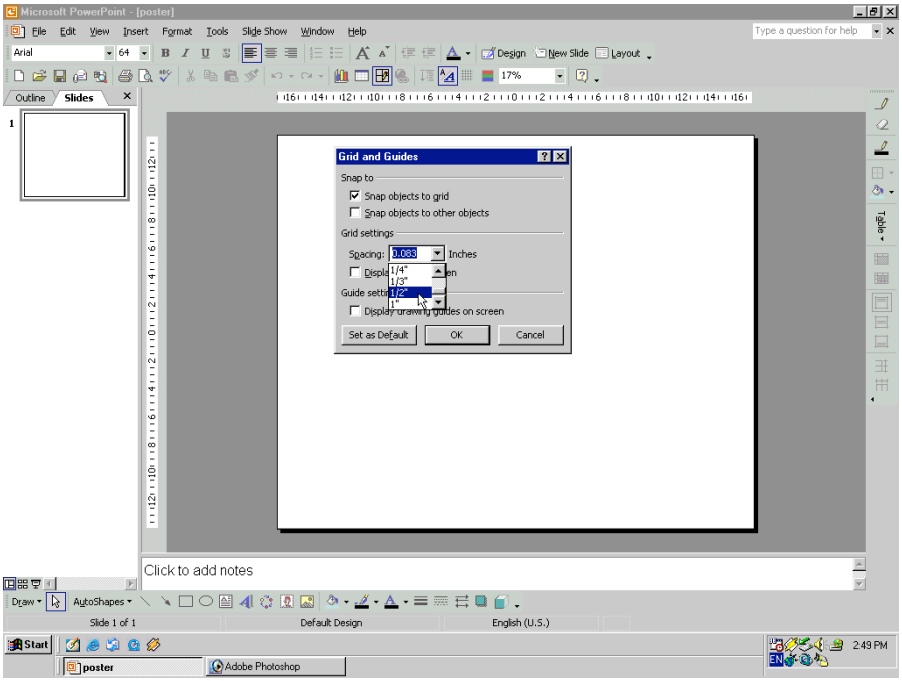
3. Enter the dimensions for your poster (34" wide x 44" high).



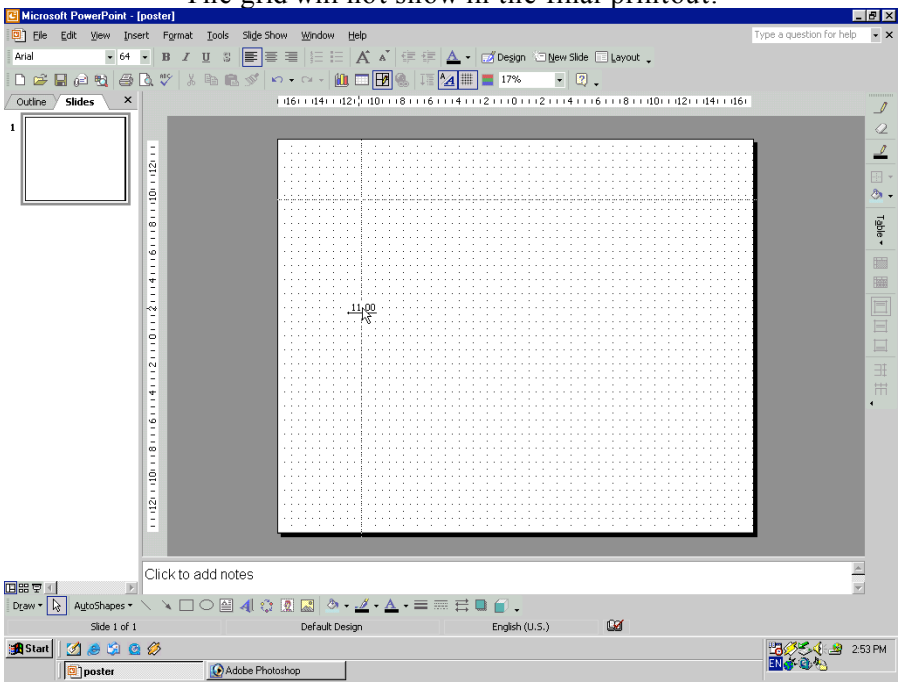
4. At this point you may wish to turn on the “Grid” to help align elements in your poster. Choose View→Grids and guidelines.



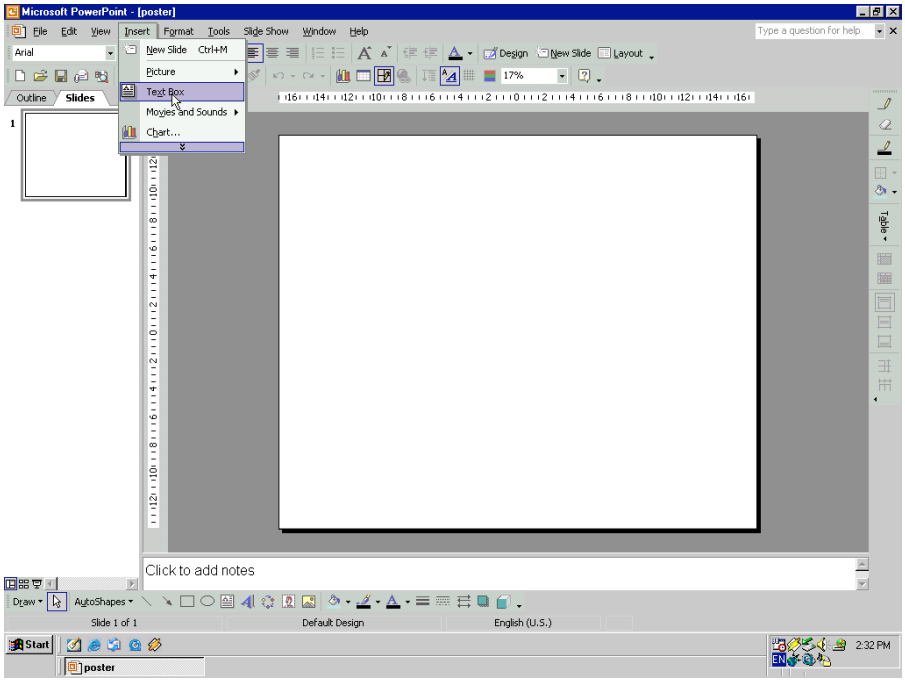
You can then choose the spacing of the grid.

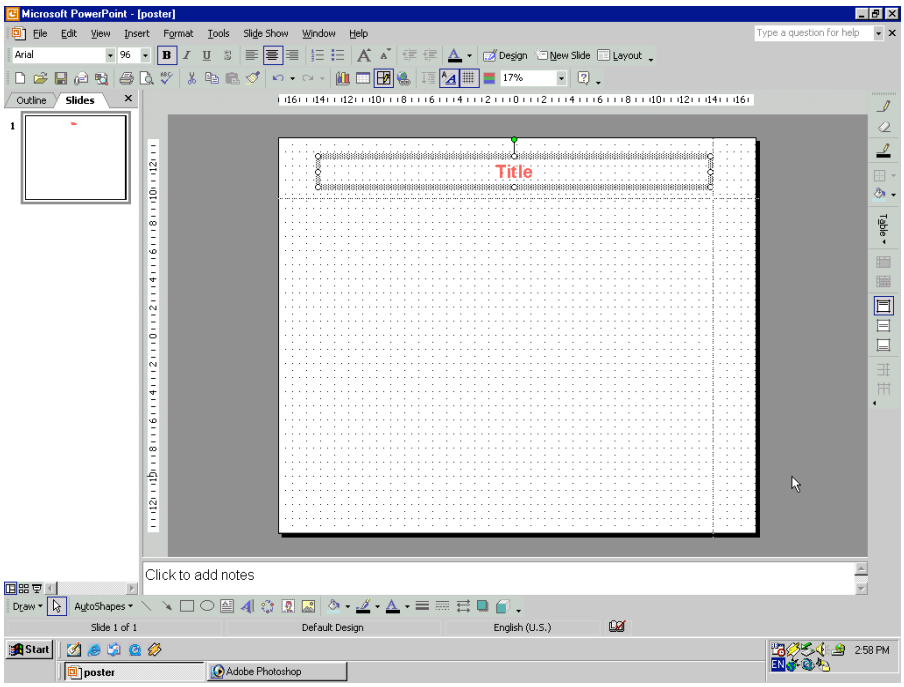


The grid will not show in the final printout.

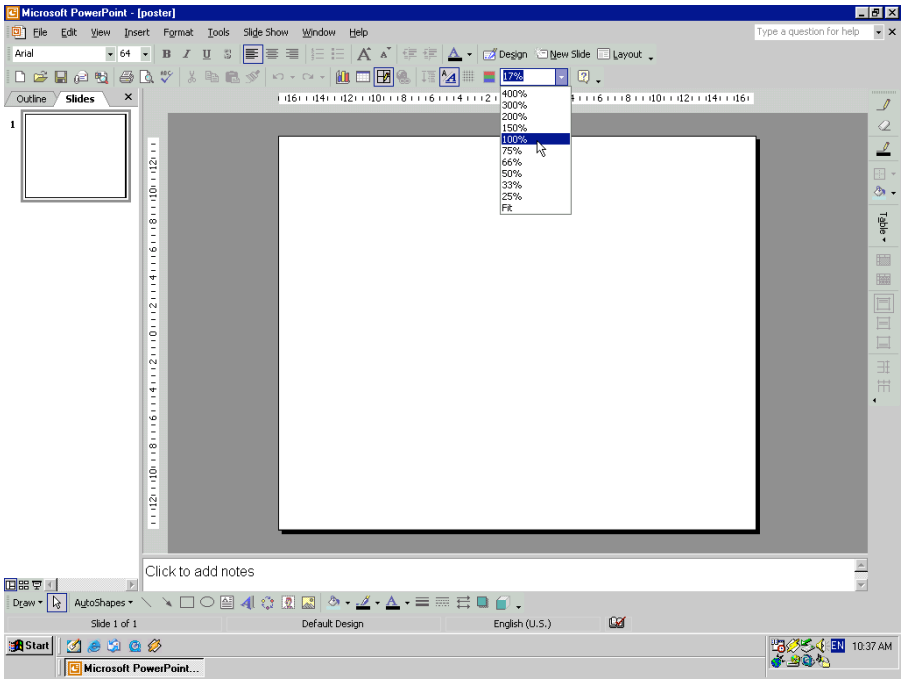


5. Insert your title "text box" at the top of the poster. Choose Insert → Textbox

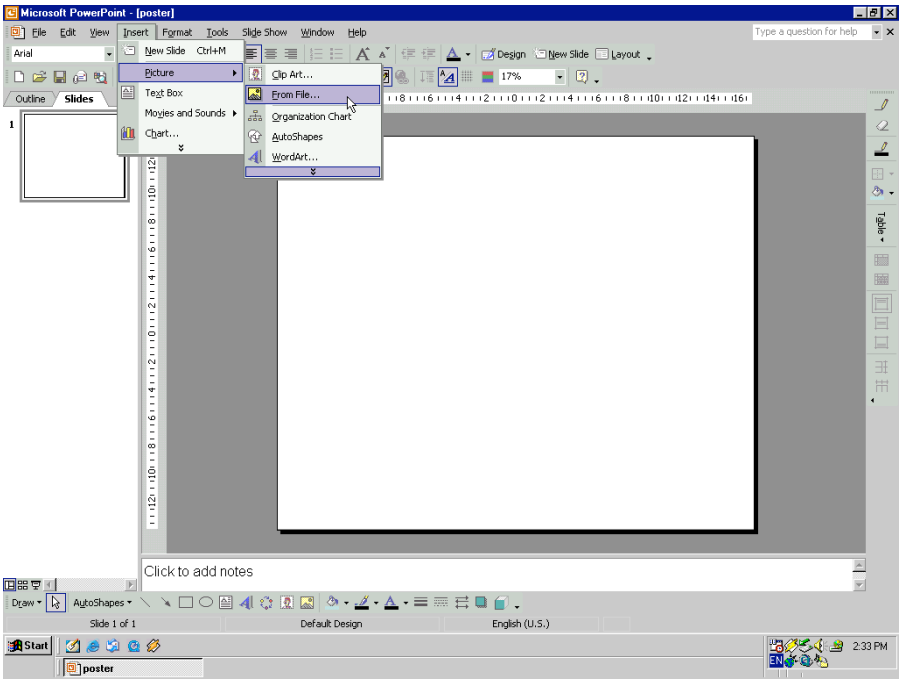




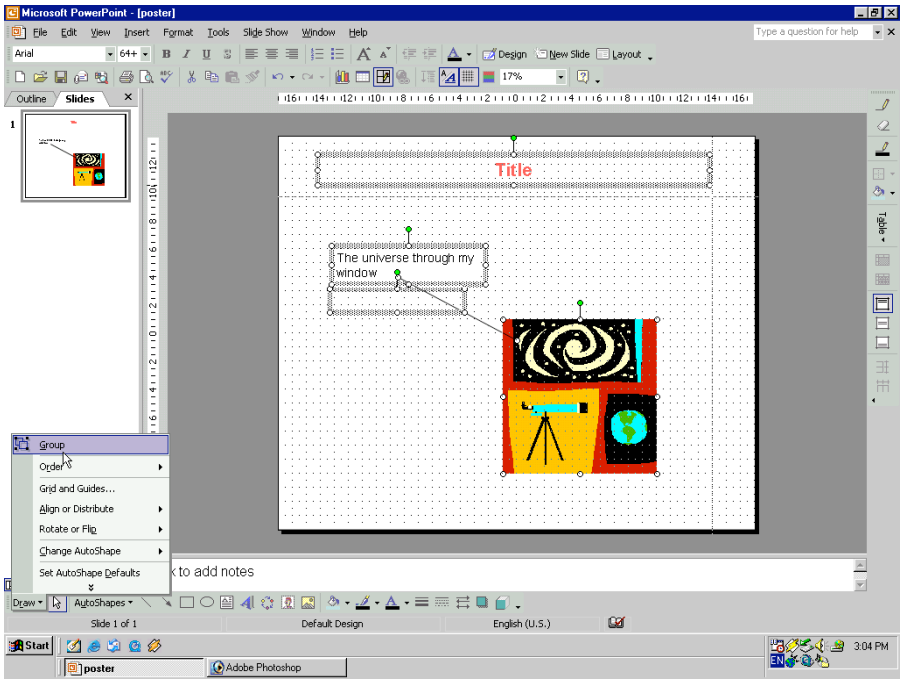
6. You can zoom in or out on the document to check alignment and size of text.



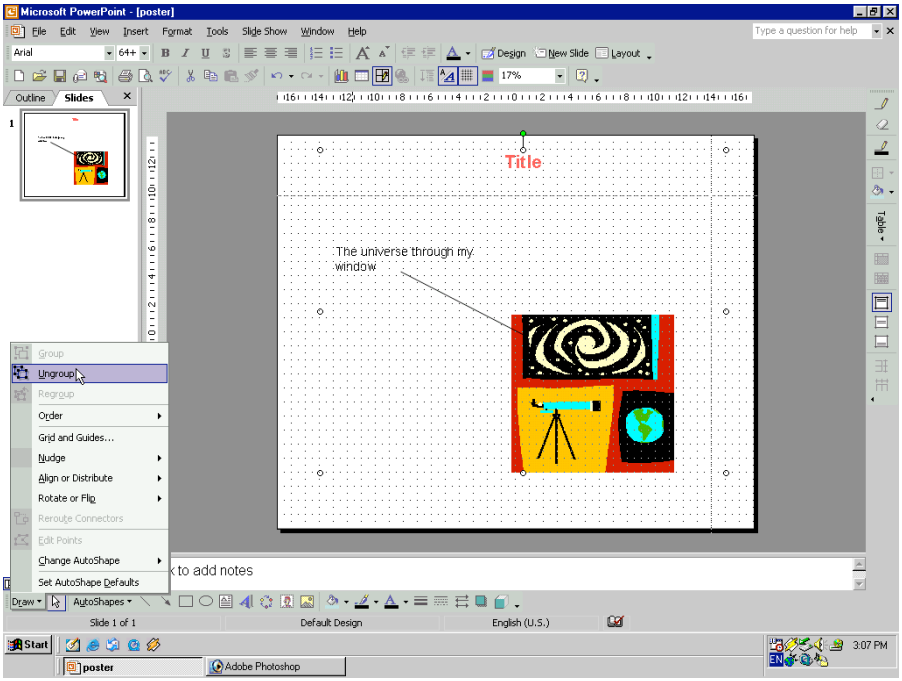
7. To insert an image choose Insert→ Picture → From file (or Clipart).



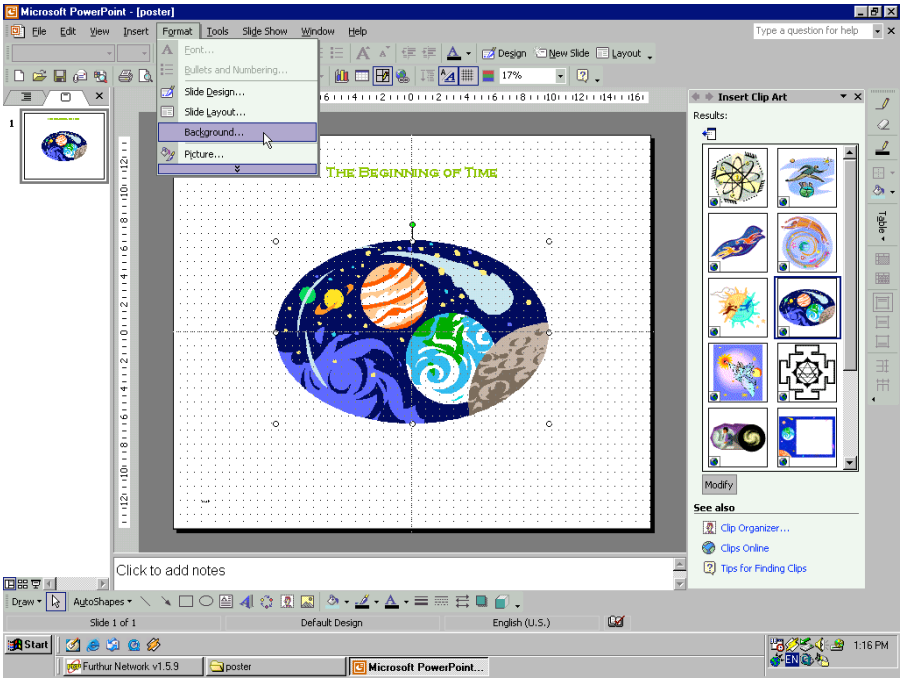
8. **Grouping**. You may need to group text and objects to move concurrently. To do so select one object or textbox and while holding the "shift" key, select the other objects one at a time, choose "group" from the draw menu at the bottom left, then move them together.



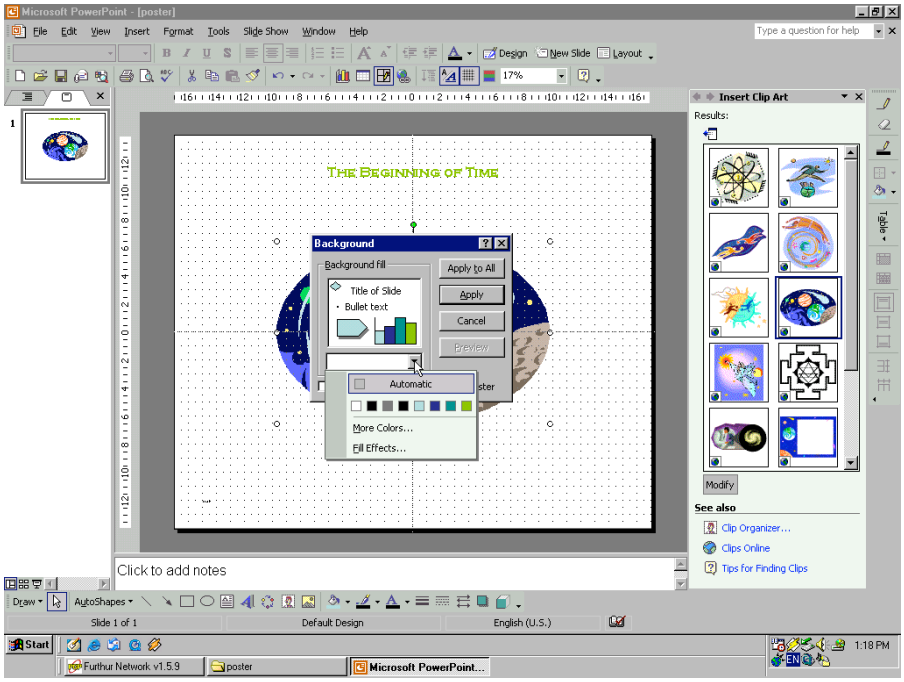
9. To Ungroup, select the grouping and choose “ungroup” from the draw menu.



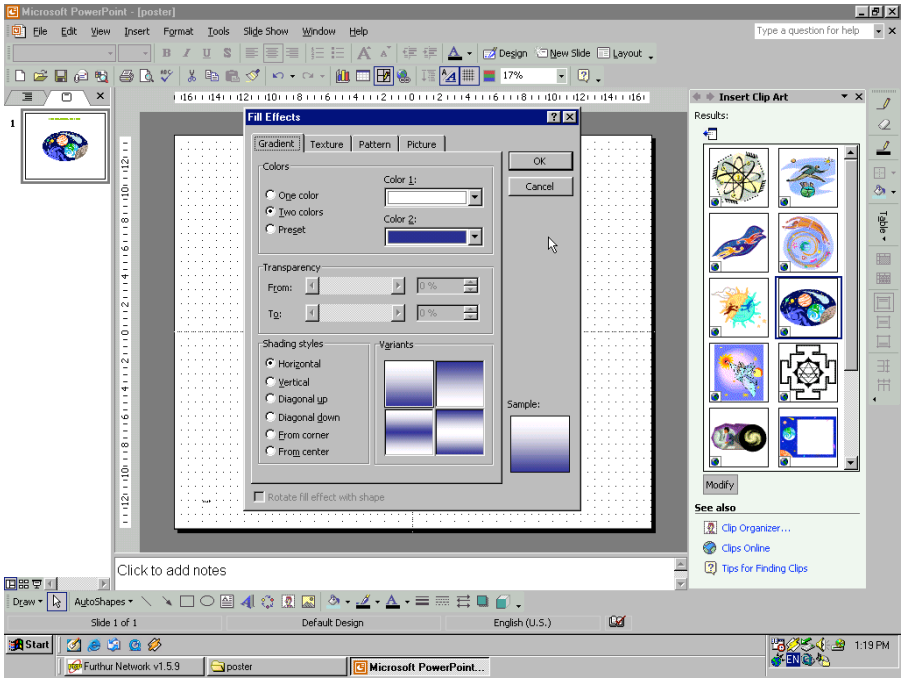
10. **Background.** There are a variety of background colors, effects and textures to choose from. Choose Format -> background.



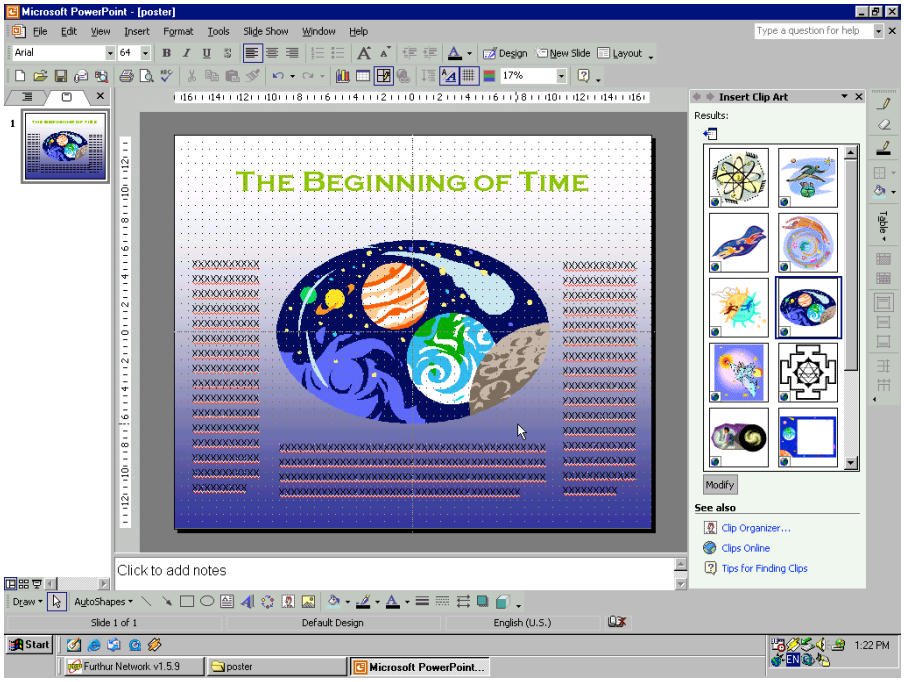
You can choose a solid color that is recommended (default) or choose “more colors” to open the palette window.



You can also choose fill effects with your chosen colors as well.



Final mock-up



PROOFREAD YOUR POSTER!

Use the % button to look at the detail – perhaps 100% or higher.

SAVE, SAVE, SAVE! In multiple places- on your G drive, desktop, hard drive, etc.

Make a copy onto a portable medium – CD or jump drive. Take it to another computer – a PC – and make sure your poster looks OK.

FINAL CHECK BEFORE YOU PRINT

Have some people, including your mentor, look over your poster before you print. If people are confused, it is far better to fix the problem now than to lose people when you present. Pay particular attention to things that may not be necessary: eliminate everything that you can!

A good example (except she forgot to include her Mentor's Name)

Nutrition and Skeletal Disease in the Seventeenth Century Colonial Chesapeake

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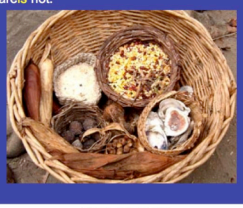
ABSTRACT

Historians and archaeologist of the colonial era describe the diet of the late seventeenth century Chesapeake to be more than nutritionally adequate, surpassing the diet of their English counterparts. This picturesque description of colonial life, however, contradicts the extensive signs of physiological stress and markers of malnutrition evident on skeletal remains excavated from colonial sites. Rather than indicating a superior diet, the skeletons indicate that colonists were under severe nutritional and physical stress and were dying young. Reanalysis of both nutrition and skeletal health revealed no evidence suggesting that either source of information is inaccurate. This study suggests that the skeletal pathologies are caused by the over consumption of meats and the over indulgence of luxury items such as tobacco and alcohol rather than any deficiencies in their diet. Components of these overindulged resources interfered with the absorption of the dietary calcium already present in the colonial diet and contributed to calcium leaching from bone.

17th Century Colonial Diet

Reanalysis Analysis of 17th century colonial Chesapeake historical documents and faunal remains supports the suggestion that colonists had an adequate diet with meat protein, corn, legumes, vegetables, fruits, and fruit-based beverages; all of the essential amino acids, proteins, and vitamins would have been readily available to colonists.

Despite the abundance of resources apparently available to the colonists, the skeletons of 17th century colonists from the Patuxent Point Site show extensive signs of physical stress and malnutrition. Stress due to hard work, such as fractures and arthritis, is to be expected; however stress due to malnutrition and nutritional deficiencies, which are also common among colonists, areis not.



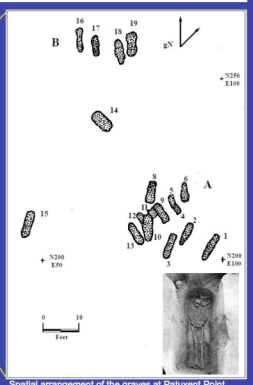
QUESTION

The remains of the individuals who lived and died at Patuxent Point suggest that, while the Chesapeake diet may have been nutritionally adequate, this 'adequacy' did not translate into good skeletal health.

WHY?

PATUXENT POINT SITE

Locations of the Patuxent Point, Clifts, and Jordan's Journey colonial Chesapeake sites (CFW 2006a)



Spatial arrangement of the graves at Patuxent Point Cemetery (King and Ubelaker 1996)

The Patuxent Point site is a domestic, 100-acre tobacco plantation in Calvert County, Maryland (JPPM 2003). It was occupied from 1658 through the 1690s. Eighteen human graves were uncovered during the excavations of the site and a total of 19 individuals were unearthed (King and Ubelaker 1996). Most of my skeletal analysis is for the Patuxent Point site, but findings were confirmed by analysis of data on X skeletons from the Jordan's Journey and Cliffs sites.

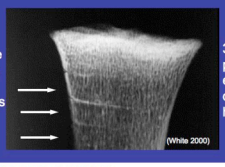
PATUXENT POINT SKELETAL EVIDENCE

Many osteological markers of malnutrition were present on the skeletons:

Six individuals, 38% of the skeletal remains showed evidence of **generalized bone loss** throughout their skeleton (King and Ubelaker 1996). 50% of the mature males, 20% of the mature females, and 40% of the immature individuals exhibited bone loss.

Harris lines and **dental hypoplasia** are also prominent manifestations. Both are caused by similar etiologies: stressful periods of disease or malnutrition (White 2000).

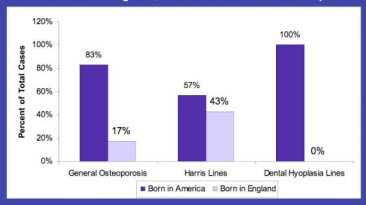
44% of the population exhibited Harris lines



38% of the population exhibited dental hypoplasia

CULTURE AS THE CAUSE

The place of birth of the colonists, in comparison to the frequency with which individuals exhibited each pathology, indicates that some aspect of 17th century Chesapeake life, in contrast to life in England, did indeed have a direct impact on the health of colonists.



Colonists who were born in the colonies were more likely to develop osteoporosis and form dental hypoplastic lines than colonists who were born in England and then immigrated to the Patuxent Point plantation.

17th Century Colonial Dietary Habits

Seventeenth century Chesapeake colonists were set apart from their English counterparts and from individuals in the 21st century by their diet; the colonial diet exceeded that of 17th century Englishmen primarily in the amount and quality of meat consumed.

Their excess consumption of the staple of their diet, meat, may have inadvertently affected their health negatively.

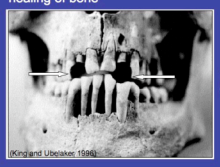
Increased Animal Protein Consumption → Increased urinary calcium loss and decreased calcium resorption ← **Increased Sodium Consumption via Preserved Meats**

17th Century Colonial Lifestyle

Seventeenth century colonists were both heavy alcohol and heavy tobacco consumers. Their consumption of both alcohol and tobacco were to such an extreme that visitors from England often took note of the amount of alcohol the colonists drank daily and the amount tobacco they smoked (Schaun and Schaun 1961); archaeological colonial sites are often littered with tobacco pipes.

Tobacco Smoking

- Nicotine inhibits milk production
- Nicotine reduces amount of vitamin C in breast milk
- Restricts blood flow to all tissues-> delays healing of bone



Pipe Wear

Alcohol Consumption

- Reduces intestinal absorption of calcium
- Promotes calcium leaching from bone
- Toxic to osteoblasts -> slows bone growth and causes formed bone to have thinner and less dense cortical walls

Alcoholic ciders were the customary drink of the Chesapeake

CONCLUSIONS

The osteological stress exhibited by seventeenth century skeletal remains, rather than being indicative of malnutrition, is evidence of the wealth of resources available to colonists. Overindulgence of the rich resources available in the New World is the cause of the extensive osteological stress experienced by the colonists of the late 17th century Chesapeake.

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