DATA SCIENCE CAPSTONE PROJECT 1

Different purposes, audiences, and expressions

	Academic (specialist)	Industry (non-specialist)
Purpose		
Audience		

Examples of unclear purpose: I want to make an original contribution to science.
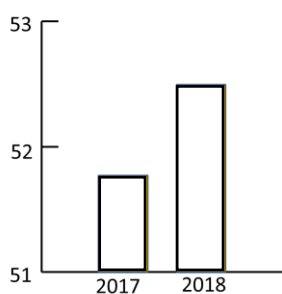
I am told to display my data in the report.

I want to impress the audience with the display.
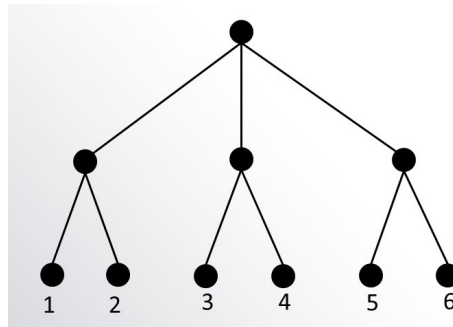
Examples of clear purpose: _____

_____

_____

Type of expression	Information	Message
Example	"A concentration of 175 ųg/m^3 has been observed in urban areas."	"The concentration in urban areas (175 ųg/m^3) is unacceptably high."
Provides		
Designed as/to be		
Belongs in		

Difference between verbal and visual presentations

Presentation	Verbal	Visual
Function		
Processing		
Strength		

_____

_____

_____

_____

Organize the slideshow
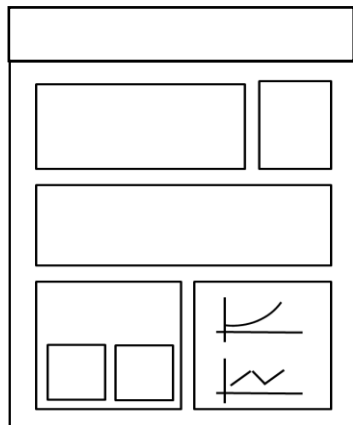
_____

_____

_____

Guidelines: (1)_____

           (2)_____

Organize the layout

Adjust the spacing
between the lines

Top to bottom
• text
• text
Left to right
• text
• text

Balance the slides

2

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Visual representation involves choices

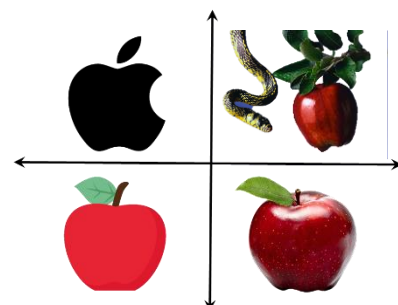Example

Interpretive convention:
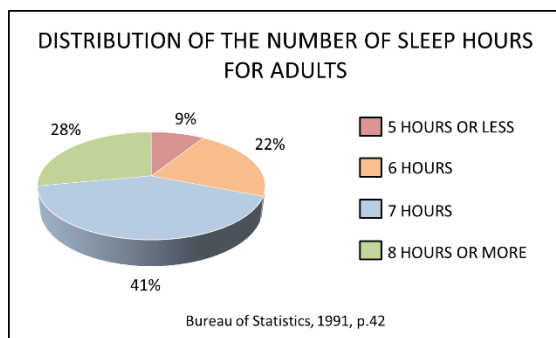
Apple =

1)

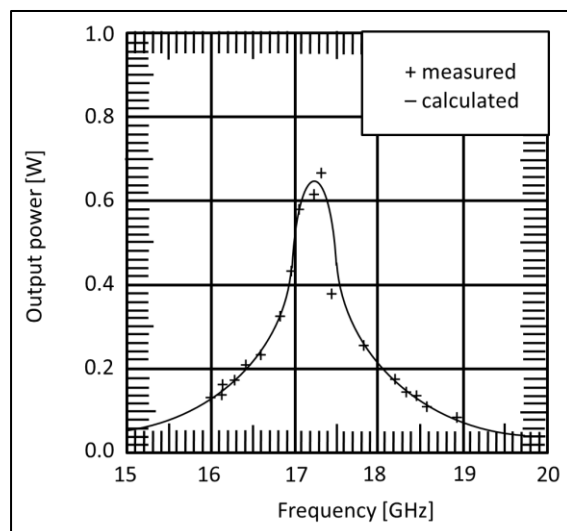2)

Simplify visual displays for clarity

Problems: Improvements:

Reduce distractions on slides: 1) _____

2) _____

Connect your data display to your writing:

Notes:

Furthermore, Colayol sales has dropped by 50% in the past two years, since the recession in 2002, as shown in figure 1.
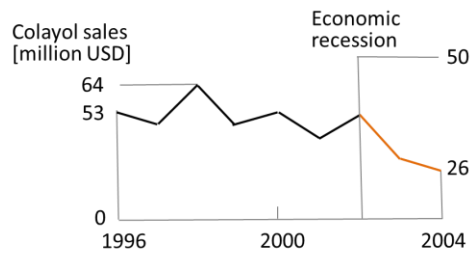
Colayol sales [million USD]

Economic recession

64
53
50
26
0
1996   2000   2004

Figure 1. Colayol sales dropped by 50% following the recession.

The trend in figure 1 shows that Colayol...

Structure

Make use of visual grammar

Cohesion: _____

_____

Separation: _____

_____

Prominence: _____

_____

Tips on displaying quantitative data

Population [millions]

Germany   82.2
France   60.5
UK   58.8
Netherlands   15.9
Belgium   10.2

0   32

Life expectancy [years]

France
Germany
Netherlands
UK
Belgium

78   79

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec