

Statistical Analysis

Part III:

Presenting Information and Conclusions

graphical representations | research report format | layout and design | statistical summaries

Present

You must analyse everything.

How you present, convince, or report is a different matter altogether.

TED Ideas worth spreading

Present

Yoda Tips Part V

Us: **You:**

Present

Yoda Tips Part V

Formatting

- Wrapping, shrinking, merging cells
- Shading, borders, gradients
- Number formatting

Present

Summarizing Analysis

Key Ideas:

- The human brain cannot absorb information and create understanding if it can't "decode" what it's seeing.
- The more energy spent on decoding, the less is left for understanding, following your argument, or being compelled or persuaded by that argument.

Conclusion:

Be succinct.
Present visually clear, summarized, and organized information. Be consistent with your layout design.

Good Examples

Somewhere in Between

Bad Examples

Present

Yoda Tips Part IV

Presenting & Graphing

- What NOT to do with graphs

Present

- File / New / Open / Save / Print / Exit / Data
- Enter
- Analyze

 - Calculate
 - Descriptive Statistic
 - Forecast
 - Interpolate

- Create chart / Report / Group & Simplify / PivotTable
- Present

Yoda Tips Part IV

Presenting & Graphing

What can we say about these graphs?

Year	Value
2007	5.5
2008	5.5
2009	5.5
2010	5.5
2011	5.5

Year	Value
2007	6.5
2008	6.5
2009	6.5
2010	6.5
2011	6.5

Year	Value
2007	7.0
2008	7.0
2009	7.0
2010	7.0
2011	7.0

Year	Value
2007	6.0
2008	6.5
2009	7.0
2010	7.5
2011	6.5

Present

- Enter
- Analyze
- Present

Presenting & Graphing

One Variable

- With Data: Gantt Chart
Task Varieties per item
- With Data with Embedded Series: Bar Chart
Many Categories
- Bar Chart
Many Items
- Gauge Chart
Few Items
- Bubble Bar Chart
One Variable per item
- Dot Plot
Cyclic Data
- Line Chart
Non-Context Data
- Line Chart
Single or Few Categories
- Line Chart
Many Categories

Two Variables

- Scatter Plot
Two Variables
- Bubble Chart
Two Variables

Relationship

Distribution

What would you like to show?

Composition

Many Variables

Choosing Over Time

Notch

Row Periods

Many Periods

Source:
Nebraska Library Commission. (2010, Jan 13). *Presenting Data in Meaningful and Interesting Ways*. Retrieved Nov 23, 2010, from Slideshare.net: <http://www.slideshare.net/nebraskaccess/compass-live-presenting-data-in-meaningful-and-interesting-ways>

Present

- Plan lesson
- Create material
- Build story
- Craft story

Enter



- Coordinate
- Evaluate
- Group & Simplify
- Reassess



- Communicate
- Explain
- Present



Us:



You:



Yoda Tips Part IV

Academic Integrity

 **Western Ontario**

 **Queen's**

More extensive than plagiarism

1. Academic integrity is more extensive than plagiarism. It applies to the practice of research, and the writing, teaching, learning, design, management, and administration of education.
2. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
3. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
4. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
5. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
6. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
7. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
8. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
9. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.
10. Academic integrity is concerned with the values, principles, and practices that underlie the conduct of research, teaching, learning, and administration.

Credibility

Verification

Citations

Present

Yoda Tips Part IV

Us:



You:



Analyze

• Fix layout
• Organize
• Filter data
• Enter

• Manipulate
• Calculate
• Create info

• Calculate
• Generate
• Simplify
• Visualize

Present



Referencing and Citations



- Paste Excel Worksheet Object
- Making "styles"
- Using "styles" (instant tables of contents)
- Making your reference library
- In text citations (APA)
- Works cited (APA)

Must-know Features

You must know the following by the end of this process

Wrap up	headers and footers cell formatting exporting to word	importing data worksheet management data filters custom number formats
	=mode() =concatenate() =int()	=correl() =naming cells
	=stdevp() =intercept()	layout conventions simple macros freeze panes
=quartile() =rand() paste special graphing conditional formatting	=if() =countif() =slope() =median()	sorting Absolute Cell Reference Relative Cell Reference
		forms and buttons =average()



An Exercise

These are statistics Mr. Boulton compiled to support a thesis paper towards his Masters Degree. They were calculated from actual data. In a group, discuss the findings and draw conclusions.

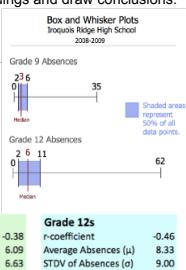
Iroquois Ridge High School

Comparison of Absences to Final Grades (all subjects)
For the 2008 - 2009 school year

All Grades	
Overall r-coefficient	-0.40
Average Absences	5.73 per student, per subject
STDV of Absences	6.67 per student, per subject

Grade 9s	Grade 10s	Grade 11s	Grade 12s
r-coefficient	-0.34	-0.34	-0.38
Average Absences (μ)	4.10	4.67	6.09
STDV of Absences (σ)	4.48	5.14	6.63

All Grades	
r-coefficient	-0.40
Average Absences (μ)	5.73 per student, per subject
STDV of Absences (σ)	6.67 per student, per subject



What else might you want to know?