

# Knowing What You Don't Know

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SELF-ASSESSING YOUR UNDERSTANDING  
OF STATISTICS & ANALYTICS

# Introduction

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## Session Goals

- Identify deficiencies in understanding stats & analytics
- Define key steps in remedying deficiencies
- Make a plan to build new skills

## Ground Rules

Why this topic?

# Interactive Question #1

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How do you characterize your current understanding of statistical concepts and methods?

- **Apprentice** – I know what an average is and can make a basic line or pie chart, but beyond that I'm not so sure
- **Journey person** – I know the lingo, the process, and have worked on 1+ analysis projects, but still have room to grow
- **Master** – I have advanced training or experience working with data. I'm a go-to source for support and solutions.

# Lesson #1 – Have a Plan

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What do you:

- Want to know?
- Need to know?
- Don't know you don't know?

Measure 2X cut 1X



**PROPER  
PLANNING  
PREVENTS  
POOR  
PERFORMANCE**

# Lesson #1 – Have a Plan

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Assess Understanding

Explore Resources

Develop Plan

Grow Knowledge & Skills



**A GOAL  
WITHOUT  
A PLAN  
IS JUST  
A WISH**

# Interactive Question #2

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Your ILL office offers 24 hour turnaround document delivery. Your experience and other feedback suggest a longer wait for document scans than promised. You gather details about DD requests and calculate the p-value of your data sample. The p-value = 0.004

- A. Not a statistically significant result
- B. Statistically significant result – 24 hour turnaround is accurate
- C. Statistically significant result – 24 hour turnaround is inaccurate
- D. What?

# Answer: Question #2

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- D. What?

# Lesson #2 – Walk Then Run

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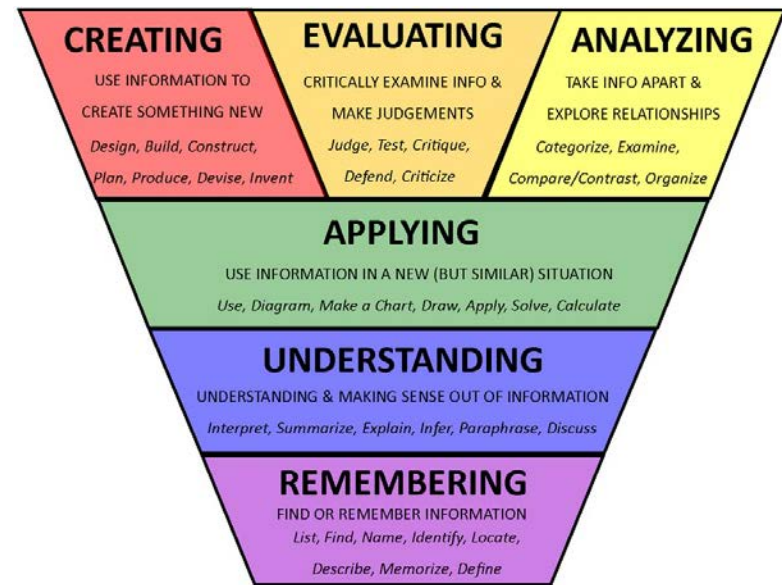
Vocabulary & Basic Concepts

Applications

Advanced Concepts

More Applications

Software Aptitude





# Interactive Question #3

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You are looking at last year's book usage at your institution, specifically print and ebook usage in History and related areas (LC call numbers C, D, E, F). Which chart would be most informative?

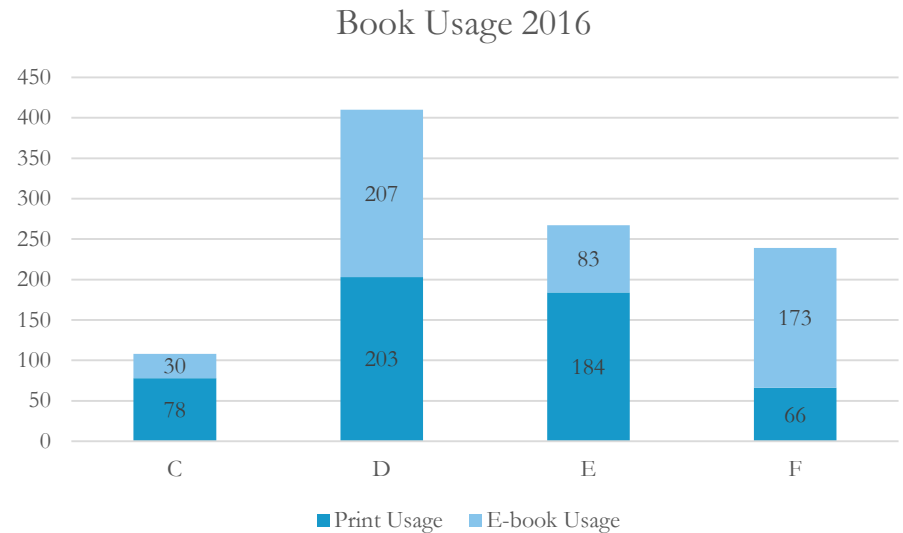
- A. Pie Graph
- B. Line with Markers Chart
- C. Stacked Column Chart
- D. 3-D Area Chart

# Answer - Question #3

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# Lesson #3 – use it!

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## **Use It #1: Take advantage of resources around you**

- LC HA29 & QA276 / Dewey 519.5 & 311
- Online training materials
- Local university Statistical Consulting Centers, interns, etc

## **Use It #2: Practice skills you acquire regularly**

- Work Projects
- Family Projects
- Endless Curiosity

# Interactive Question #4

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What resources do you use when working with statistics?

# Conclusion

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Test your basic understanding of statistical vocabulary and concepts at:  
<https://goo.gl/forms/Cpy7dm0M4ZediEns1>

Determine what you want to know and how you will use your new skills

Start with the basics

Check out this selected resource list for inspiration

<https://goo.gl/DoV5XH>

“What gets measured gets managed”

~Peter Drucker