GEOG 4/5/7 9073: Environmental Analysis in R

Week 8.01: Geometry, data structures, and the flipped classroom

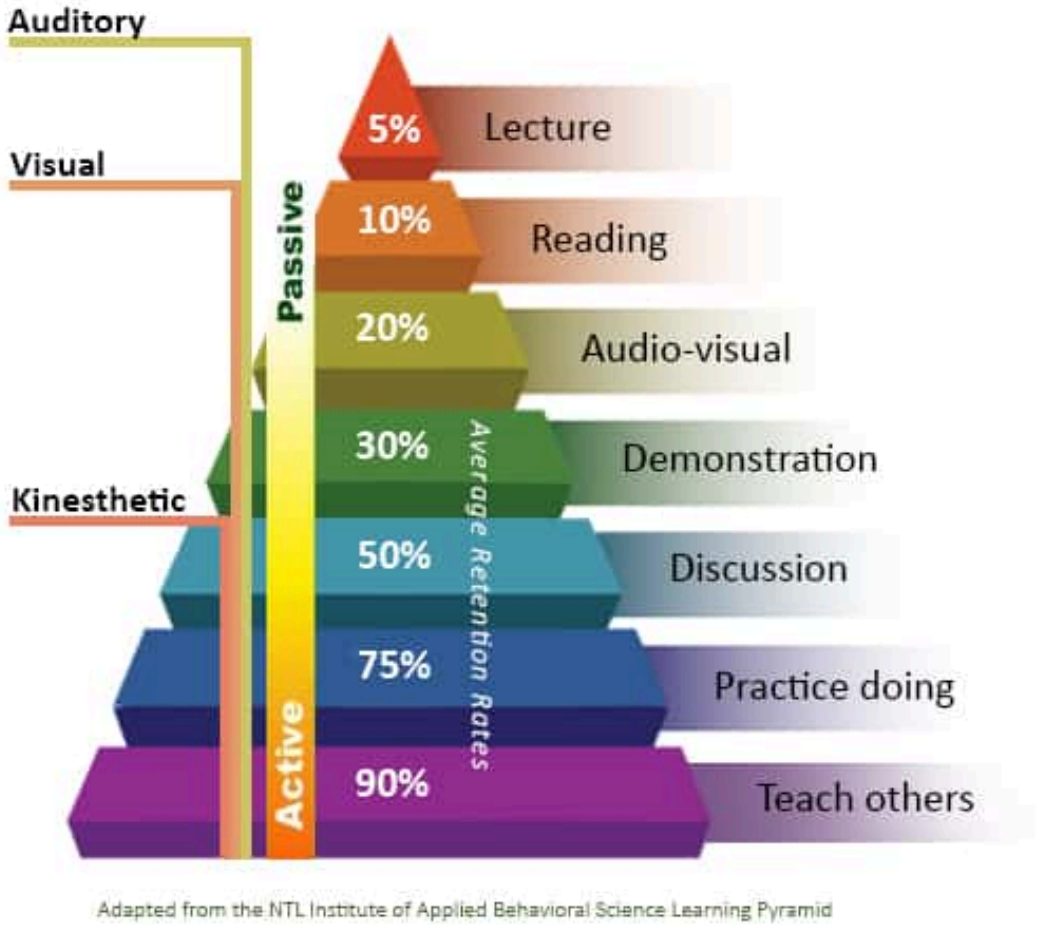
Dr. Bitterman

Today's schedule

- Open discussion
- Something different
- For next class

Anything to discuss? Questions?

How do we (and you) learn best? Thoughts?



Adapted from the NTL Institute of Applied Behavioral Science Learning Pyramid

(to be fair, there are counterarguments to this pyramid)

This week's activity

- You all read (or should have) Chapter 5 from Lovelace (https://geocompr.robinlovelace.net/geometric-operations.html)
- Instead of me providing you with a step-by-step walkthrough of the readings, **you're** going to do the teaching
- A quasi-"flipped classroom"

What to do

- Form small groups (I've assigned the groups)
- Each group will be assigned a topic (or topics) from this week's readings
- Your tasks:
    - Develop a short (10-15 min) lesson demonstrating the method(s)
    - Include:
        a. Learning objectives (what students will learn)
        b. Why the concepts/methods are important/relevant
        c. How a student would accomplish the task(s)
        d. A way to check for learning (and teaching != learning)

All relevant resources can be found in the Lovelace chapter, but use what you think is relevant

What you can use

- Anything
  - Web resources
  - Sample data
  - Whatever format you want (e.g., PowerPoint, R Markdown, something else)

Tasks and teams

Creating geometry, binary transformations, type transformations

- NAMES

Simplify, scale, shift, and rotate geometry

- NAMES

Raster aggregation, disaggregation, and resampling

- NAMES

For this week

- NEXT WEEK IS SPRING BREAK
- In-class project updates (3-5 min) the week after break. MUST ATTEND TO RECEIVE POINTS