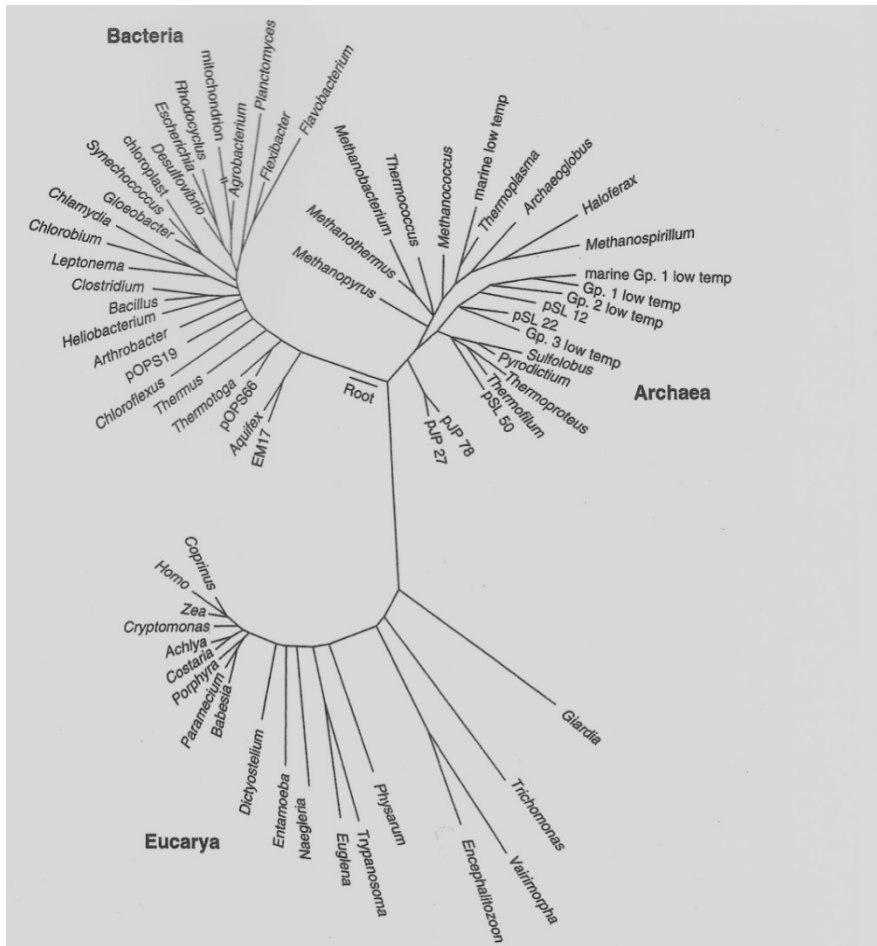


# Gen Ed to Grad School: Three Teaching Techniques that Work Across Different Disciplines, Learning Platforms, and Levels of Instruction

Dr. Robin Ericson S-CAR

Dr. Rebecca Ericson - Physics



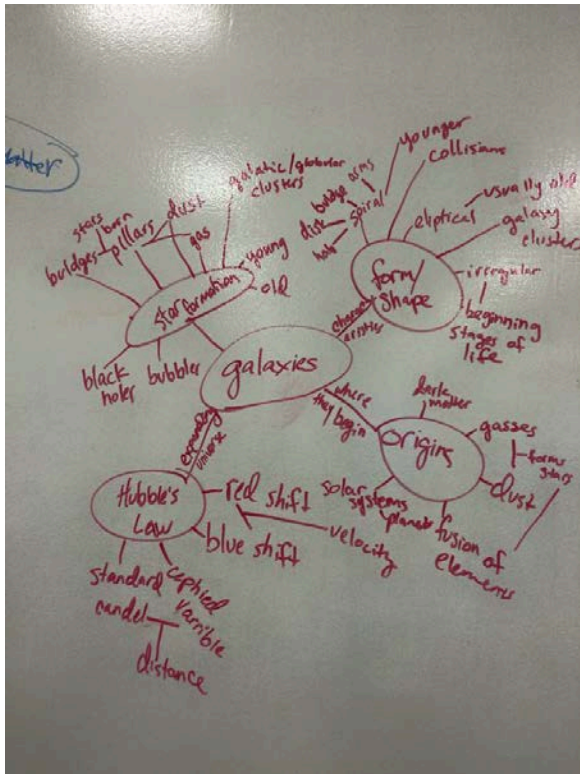
RNA tree  
grouped into  
Bacteria,  
Archaea and  
Eucarya

Norman R. Pace  
**Universal phylogenetic tree**  
1997

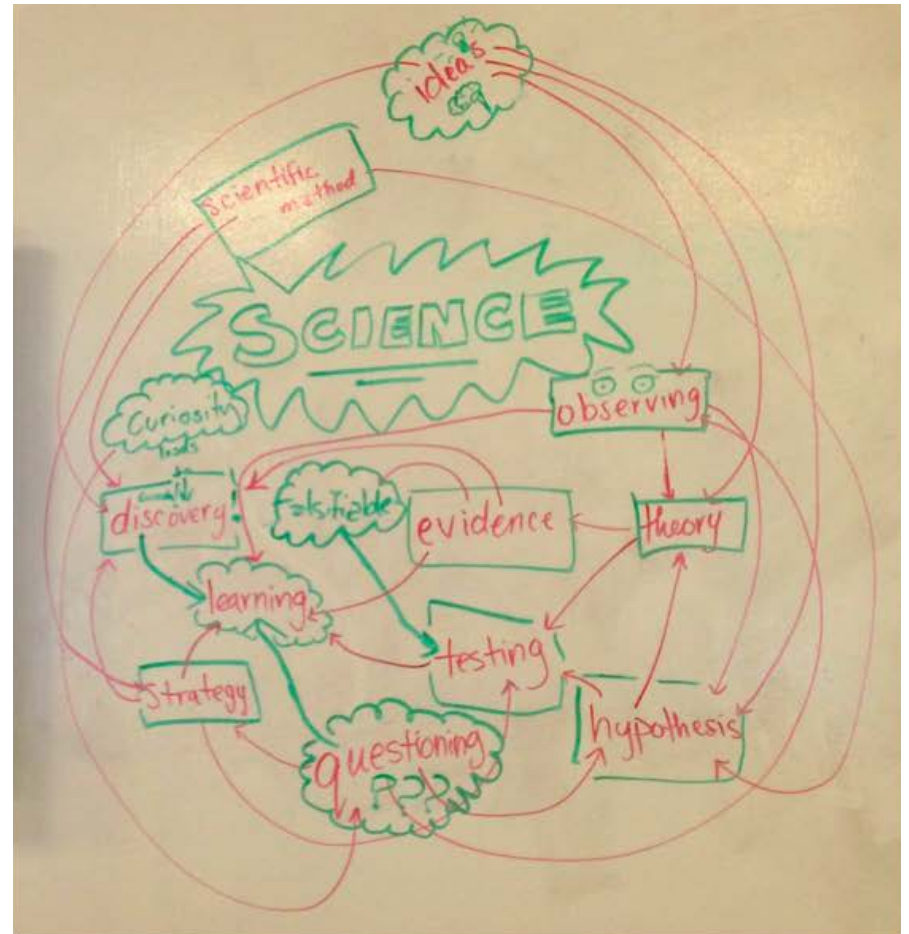
A tree diagram based on sixty-four ribosomal RNA sequences grouped into the three phylogenetic domains of life: "Bacteria," "Archaea," and "Eucarya." Reprinted from Norman R. Pace, "A Molecular View of Microbial Diversity and the Biosphere," *Science* 276, no. 5313 (May 1997): 734-40, with permission from AAAS.

# Concept maps – thought made visible

Looking for concepts and connections



“Sometimes it is best to just draw everything out in order to enhance your understanding.”

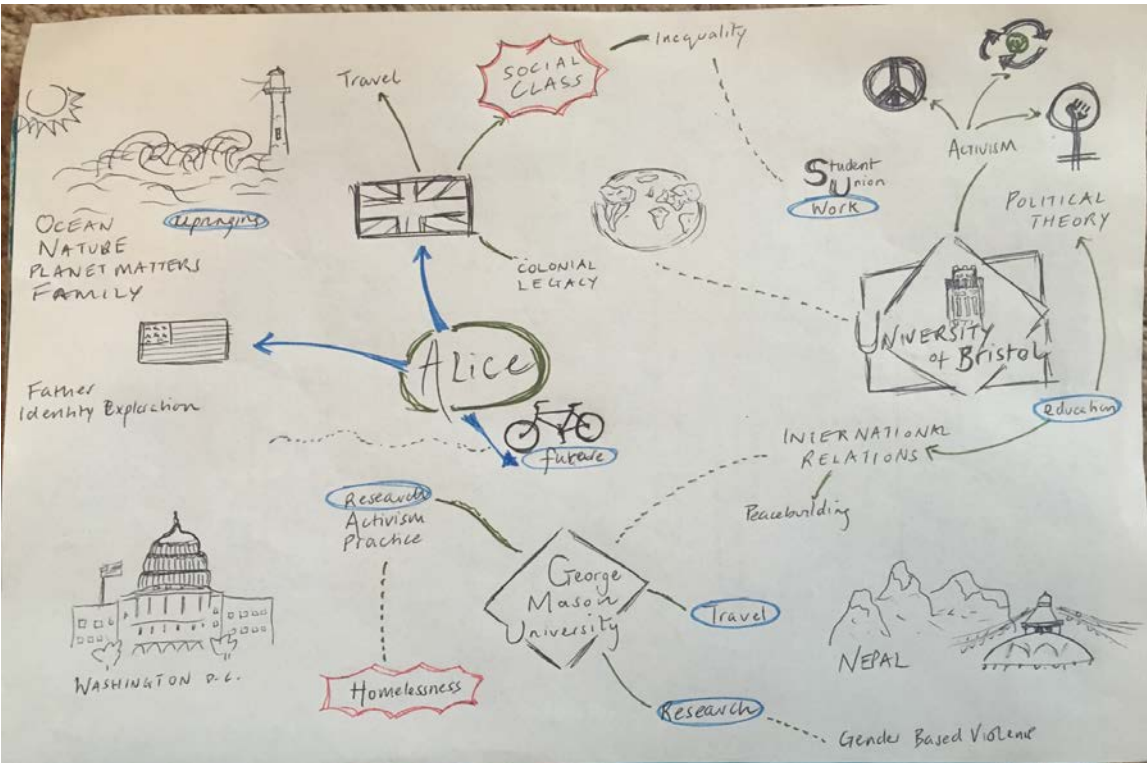
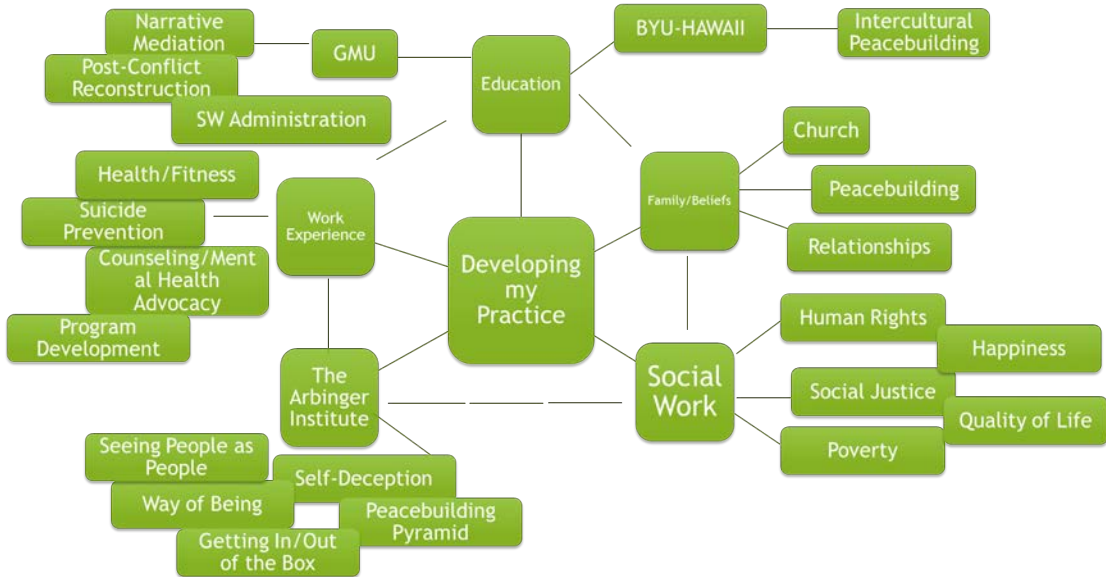


# Mind maps

– organizing ideas

## What is my practice?

- Rachelle Thompson

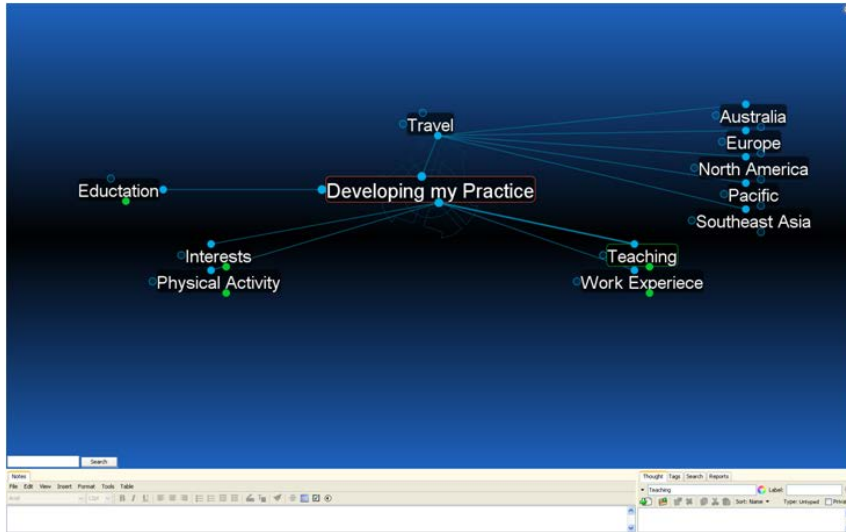


## How did I get here?

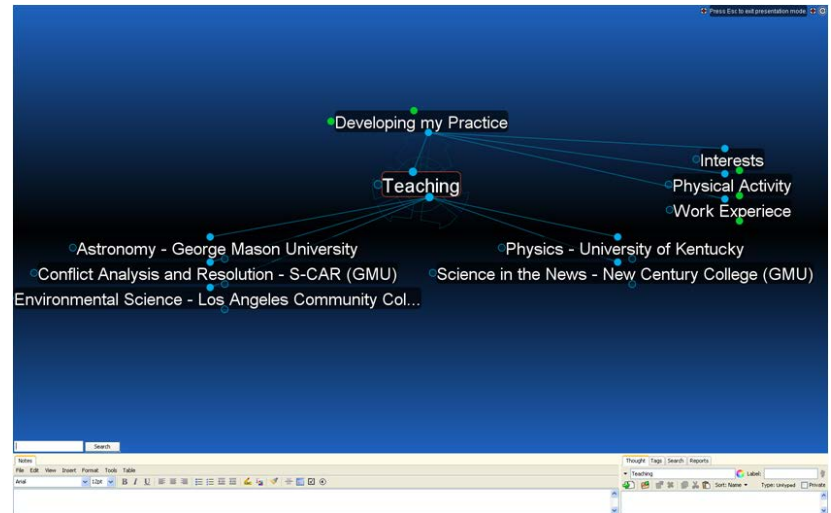
-Alice Peck

# Using “Brain”

## Starting Point



## Brain





# Media Expert

- You are in the School for Conflict Analysis and Resolution
- Can you explain the recent Syrian refugee problem to us from a conflict perspective?

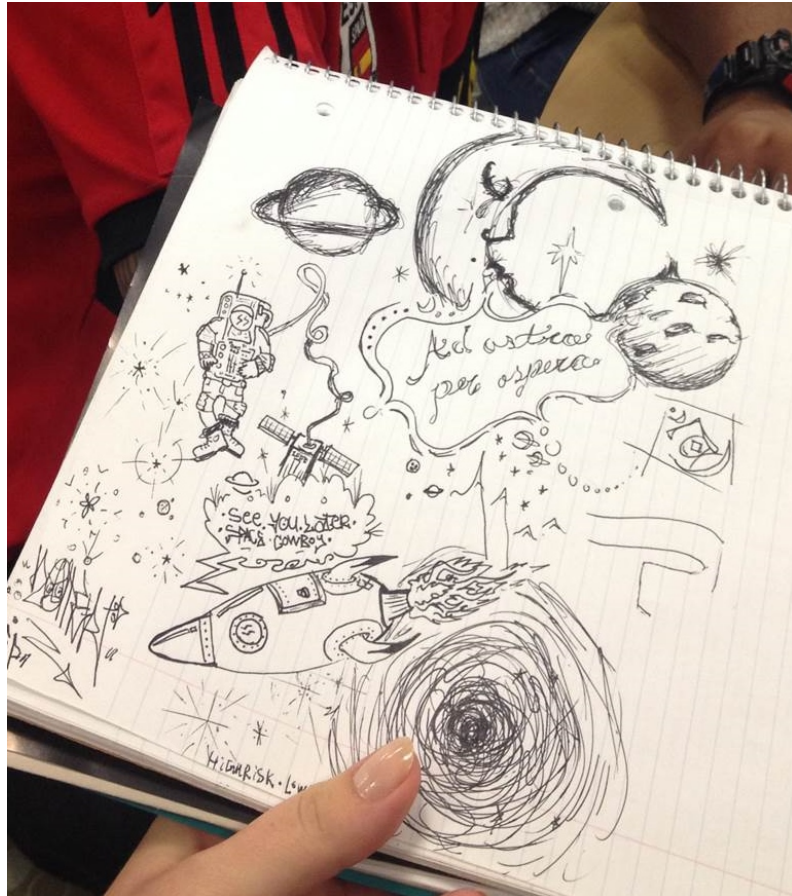


- Guidelines for media experts
- Four possible responses
  - Basic human needs issues
  - Magnitude of the migration
  - International law and norms
  - Syrian civil war



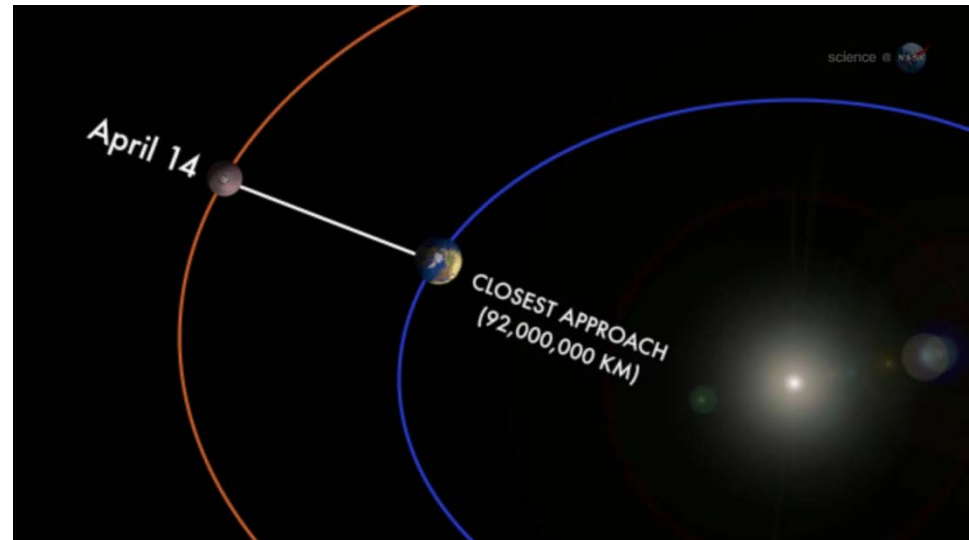
**Boldly Go** - Design a mission to a planet, moon, asteroid, or comet

Projects – putting what they know to work



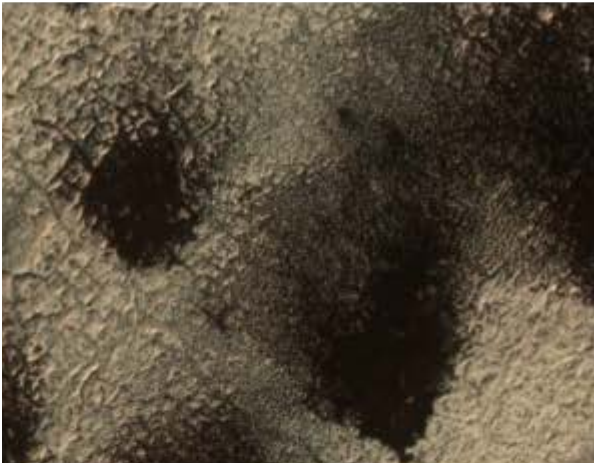
**Your Part** - How would you contribute to a space mission?

-



# Portfolio – collecting evidence of significant learning

Lab that did the most for your learning



“I thought it was great that we could learn in a classroom while also contributing to a citizen science project.”

## Journal prompts

If you only had to worry about the daily motion of the Earth as it spins, how fast would you be going as you sit here?

Discuss sources of energy on Earth and then consider which would be present and significant on Mars



# Portfolio

## Integration of Theory and Practice



Megan Strum

<https://megstrum.wordpress.com/>

*Rachelle* THOMPSON

<https://rachelletompson.wordpress.com/certifications-skills/>



**Taste Buds**

From David McCandless and Willow Tyrer, *Information Is Beautiful* 2008

A visualization of complementary flavors and ingredients used in preparing various vegetables, such as broccoli, cabbage, lettuce, and spinach, from an analysis of more than one thousand recipes, created for the book *Information Is Beautiful* (HarperCollins, 2009).

Greens and things that go with them from an analysis of 1000 recipes

# Your Turn

- ▶ Map Todd Zakrajsek's keynote presentation
- ▶ Use a tree, mind map or concept map
- ▶ Include your own teaching practices as they relate to concepts from the talk