

From learn-R to teach-R:

An expert panel on effective R instruction

- We will start at **6:10pm** to allow everyone to join
- The event will be **recorded** and posted on R-Ladies Philly's Youtube channel!
- While we wait for the event to get started, please head over to Slido for a few questions...

slido.com

Event code: #rladies-philly

Agenda

6.10-6.20pm: Introduction

6.20-6.50pm: Panel presentations

5 minute break!

6.55-7.40pm: Discussion and Q&A





Worldwide organization

...that promotes **gender diversity** in the **R community**

...via meetups and mentorship

...in a **friendly** and **safe** environment

rladies.org/code-of-conduct/



Announcements

- Mentor/Speaker directory: <u>rladiesphilly.shinyapps.io/mentorship/</u>
- Our Youtube channel: <u>vt.vu/+rladiesphilly</u>
- Slack: <u>tiny.cc/rladies-phl-slack</u>
- Upcoming R-Ladies Philly events: <u>meetup.com/rladies-philly/</u>
 - Virtual Happy Hour, March 4th
 - Datathon 2021, March-April
 - Lightning Talks, June 15th
- Feedback on headliner: tiny.cc/headliner-feedback









Judge Accountability Table

2021

DATATHON



Wed, 3/17 6-8pm Exploring judicial patterns in Philadelphia courts





Today's event

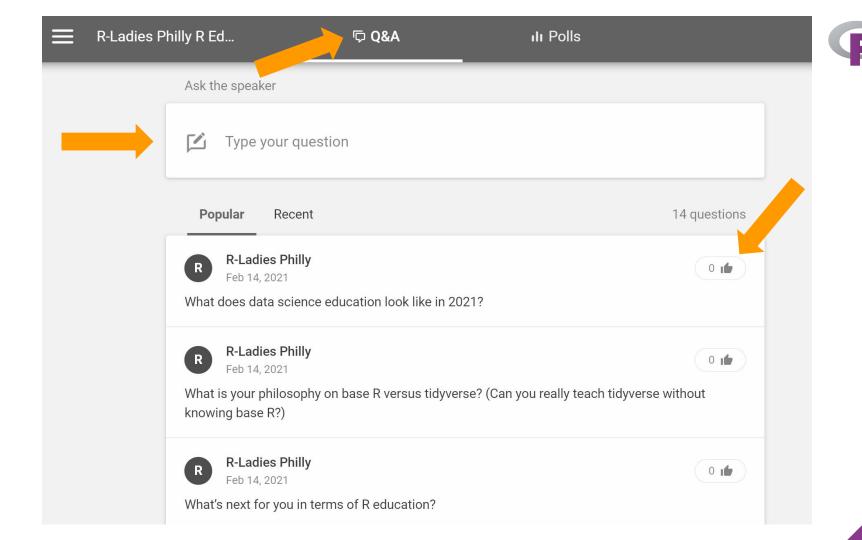
- Ama Nyame-Mensah, PhD <u>anyamemensah.com</u>
- Cass Wilkinson Saldaña, MSI <u>cassws.net</u>
- Silvia Canelón, PhD <u>silvia.rbind.io</u>

Slido for Q&A

- ★ Add questions
- ★ Upvote questions

slido.com

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Ama Nyame-Mensah

Postdoctoral Fellow & Data Consultant

```
Ama %>%
   learn(econ, policy, welfare) +
   education(UDEL, UPENN) +
   work(CRA) +
   work(UPENN) +
   work(Consultant)
```



Programming

A creative process



Teaching R

My "pedagogy"

Show don't (just) tell

Explain the context not (just) the code

Encourage active learning and play

We are all learners-educators!

Tips for engaging with data science learning communities

Cass Wilkinson Saldaña, M.S.I

Hello!

Data Instructional Specialist at the **Children's Hospital of Philadelphia**

First computer class taught as an AmeriCorps service member in the Saint Paul Public Library

Enjoys: pinball, games, cats!



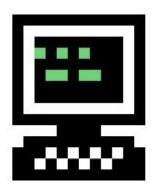






My communities of practice















What are some strategies to help you approach data communities as both a learner and educator? **Ask questions** in community spaces - asking help grow relationships + community

Share your curiosity (not just your expertise!) when possible in blog posts + talks

Reach out one-on-one - and maybe try pair programming!

(Isabella Velásquez's amazing blog: ivelasq.rbind.io/bloq/vscode-live-share/)

Welcome newcomers into the community



Silvia Canelón, PhD

silvia.rbind.io • @spcanelon

Postdoctoral Research Scientist at the University of Pennsylvania

RStudio Certified Tidyverse Instructor

Teaching experiences so far



As the instructor

- August 2020: R-Ladies Chicago
 An Antarctic Tour of the Tidyverse
- November 2020: NHS-R Community Conference
 Sharing Your Work with xaringan
- December 2020: R-Ladies Xalapa Introducción al Paquete xaringan

As a teaching assistant

- August 2020: R Medicine Conference
 - Dr. Stephan Kadauke
 101: Intro to R for Clinicians
 - Dr. Alison Presmanes Hill
 201: Intro to Machine Learning
 with Tidymodels
- October & December 2020
 - Dr. Stephan Kadauke
 CHOP R 101: Intro to R for Clinical
 Data

R-Ladies learning experiences so far



This list is much longer! There's always something to learn :)

- Data Science Lightning talks (R-Ladies Philly)
- Machine Learning Workshop (R-Ladies Philly)
- Cómo preparar una propuesta de presentación para una conferencia/meetup sobre R (R-Ladies Santiago)
- First steps in spatial data handling and visualisation (R-Ladies Johannesburg)
- Workshop: Mapas interactivos con R para la Gestión en Salud Pública (R-Ladies Lima)

- Your first R package in 1 hour: Tools that make R package development easy (R-Ladies Philly)
- Blogging with RMarkdown (R-Ladies Johannesburg)
- Web Scraping in R (R-Ladies Tunis)
- Getting the most out of text Using supervised & unsupervised approaches in NLP (R-Ladies Tunis)
- Expresiones regulares para la limpieza y transformación de datos (R-Ladies Tunis)

Concept Maps: the what

A concept map represents a mental model and can be helpful to

- Help teachers figure out what they're trying to teach
- Aid communication between lesson designers
- Aid communication with learners
- For assessment

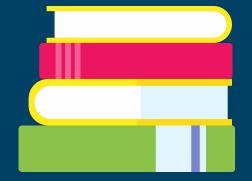
Material from <u>Teaching Tech Together</u> by Greg Wilson



Concept Maps: the how

- 1. Pick a topic
- 2. Write down two words associated with that topic
- 3. Draw a line between the words
- 4. Label the line to explain how the words are related
- 5. Ask yourself:
 - a. what other things are related in the same way?
 - b. what parts make up these other things?
 - c. what comes before or after the concepts you wrote on the page?

Material from <u>Teaching Tech Together</u> by Greg Wilson



Concept Maps: the why

The average adult's **short-term memory**, or working memory, can hold only 7±2 items at a time

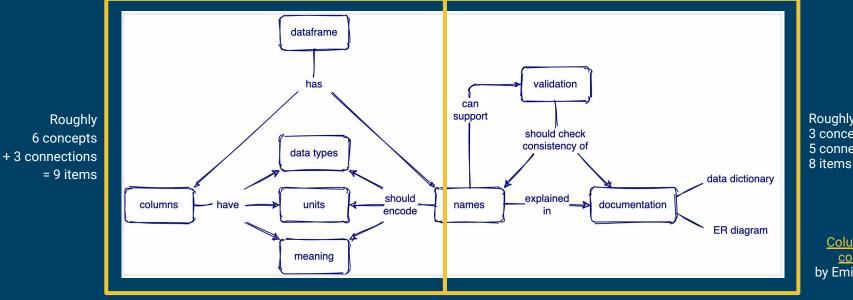
- Short-term knowledge makes it into long-term memory only after being held there and rehearsed
- Too much information too quickly means new information displaces the old information
- A concept map can help ensure a learner's short-term memory won't be overloaded

Material from <u>Teaching Tech Together</u> by Greg Wilson



Concept Maps: in practice

 An educator can teach one subsection of the concept map at a time and provide then <u>provide an assessment</u>



Roughly 3 concepts + 5 connections =

Column names concept map by Emily Riederer



Thank you!

We will post the recording on YouTube in the next couple of weeks!