

Introduction to Data Science with R

EDLD 651

Joe Nese

How many popcorn kernels are in the jar?

(keep your guess to yourself!)

Introduction to the Course

Week 1

Agenda

- Introductions
- Syllabus
- Introduce R

Learning Objectives

- Understand the course requirements
- Get you excited about R!

About me

- husband, dad
- BA: UC Santa Barbara
- PhD, School Psychology: University of Maryland
- Behavioral Research & Teaching ([BRT](#)) at UO since 2009
- Research Associate Professor

Research

- Applied statistical methods to measure and monitor student growth
- Inform the applied research methodologies used by researchers
- Developing and improving systems that support data-based decision making using advanced technologies to influence teachers' instructional practices and increase student achievement
 - [CORE](#) and [CORE II](#)
 - Inclusive Skill-building Learning Approach ([ISLA](#))

Teaching

- EDLD 651 - this one!
- EDLD 654 - Applied Machine Learning for Educational Data Scientists
- EDLD 609 - Data Science Capstone

About you

Please introduce yourself

1. Name and program/year of study
2. Do you have any R experience?
3. Tell me whatever you'd like me and the class to know (e.g., pronouns, circumstances, etc.)
4. How many popcorn kernels are in the jar?
 - No changing your answer! *Academic integrity!*

The Great Popcorn Experiment!

Why is this important?

- reproducibility
- transparency
- open data and code

Conduct research!

with quarto

Like we just did!

Create slides!

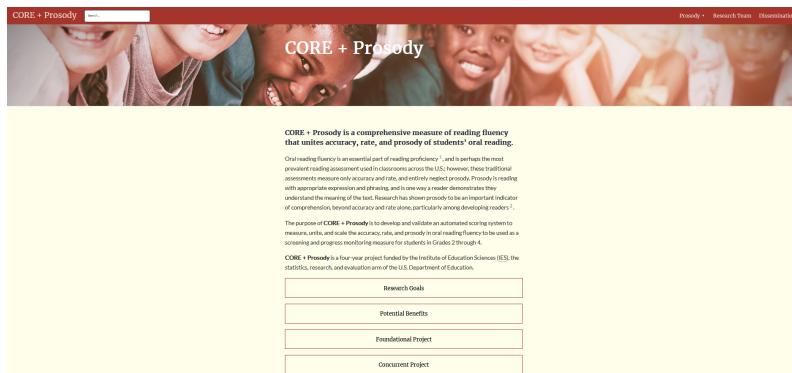
with quarto

Like these!

Create a website!

with `{blogdown}`, `{distill}`, `{bookdown}`, `{rmarkdown}`, or `{quarto}`

For a project



For this class

EDLD 651: Fall 2923 Syllabus

Assignments Schedule Data Installs

EDLD 651: Introduction to Data Science with R

On this page
[Fall 2923](#)
[Schedule](#)

Fall 2023

This is the first course in a sequence of courses on educational data science that will lead to a [Data Science Specialization in Educational Leadership](#). All courses will be taught through [R](#), a free and open-source statistical computing environment. This course focuses on introductory programming with [R](#), and [RStudio](#), basic data wrangling and visualization with the [tidyverse](#) suite of packages, version control with [git](#) and [GitHub](#), and dynamic and reproducible workflows with [quarto](#).

Schedule

Before Week 1

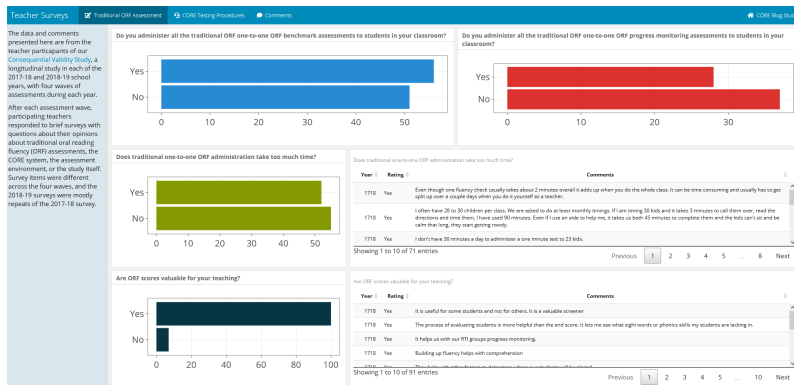
Please complete the following **five** installs before our first class.

Instructions for each are on the [Installs page](#).

1. Install [R](#)

Create a dashboard!

with `{flexdashboard}`!



Create an app!

with `{shiny}`!