

Intro to Data: Project-Based Learning

Audience:

- Students (6th-12th grade)
 - Examples favor students who enjoy sports and video games
- Little to no prior knowledge of data
- One-time workshop

Agenda:

The PBL workshop is a surface-level introduction to data analysis and usage. Participants learn the definition of data, key terms, and basic analysis through presentation/discussion before applying these concepts in a guided project.

- 0:01 - 0:10: Getting your students ready (slides 1-10)
 - 0:01 - 0:03: *Fortnite vs. Apex Legends* discussion hook
 - 0:03 - 0:08: Competing graphs; bias
 - 0:08 - 0:09: Data tells a story; definition of data
 - 0:09 - 0:10: Objective and Purpose
- 0:10 - 0:25: Understanding Charts and Graphs (slides 11-18)
 - 0:10 - 0:12: Definition of “chart” with examples
 - 0:12 - 0:14: Chart analysis check for understanding
 - 0:14 - 0:15: Connecting back to the hook
 - 0:15 - 0:21: More complicated charts/graphs (community data)
 - 0:21 - 0:25: More complicated charts/graphs ([pocket data](#))
- 0:25 - 0:55: [Where We Droppin' Project](#) (slides 19-22)
 - 0:25 - 0:28: Create groups, give preliminary instructions, and pass out materials
 - 0:28 - 0:35: Groups create parachutes with assistance
 - 0:35 - 0:45: Data collection
 - 0:45 - 0:50: Compile data into a graph
 - 0:50 - 0:53: Discuss the graph
 - 0:53 - 0:55: Final thoughts
- 0:55 - 1:00: Clean-Up

Slides

<https://docs.google.com/presentation/d/1h2NR0qotBvDXH7s3zzU4cQsNj83-q8cOGiYs7qvV74U/edit?usp=sharing>

Logistics

https://drive.google.com/drive/folders/1WHx1Xe_dbzMUn3ECLoM57essEx8_Z6z?usp=sharing