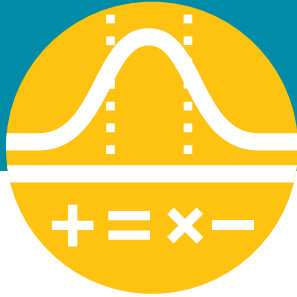


DATA DESIGN FRAMEWORK



Ingenuity's Data Design Framework provides an architecture for using data in order to answer questions, solve problems, design programs, and ultimately create something valuable. Engaging in this process is about accepting a habit of mind that will allow one to think analytically and creatively about their arts education programs. Data cannot be approached blindly; one must have a plan that provides a continuous point of reference. We encourage you and your team to let Ingenuity's Data Design Framework serve as inspiration and guidance as you engage in a design process that works for you.

"Creativity is not a talent. It is a way of operating"

— John Cleese

GENERATE IDEAS

Engage in group and/or individual brainstorming

- Be ingenious—don't hold back on being clever, creative, inventive, and original.
- Focus on one specific topic at a time.ⁱ
- Adopt a mood and culture which allows for natural curiosity.

RESEARCH

Inform yourself, build knowledge, expand vocabulary

- Identify knowledge, tools, and resources that already exist.
- Are there any examples of similar projects or studies?
- What can you borrow? What will you need to create?

NARROW YOUR FOCUS

- Choose one or two ideas that are worth pursuing.

GIVE YOURSELF TIME

Take time to reflect before moving forward

- Similar to the creative process, the data design process requires time and space to reflect on your project/study.

DEFINE YOUR PROJECT/STUDY

Be specific about what you would like to accomplish and how your solution meets the needs of your constituents

- Craft a succinct project statement:
We are working on a project/study called _____ (name of your project), which will provide _____ (brief project overview or scope) because we want to accomplish _____ (desired outcomes).ⁱⁱ
- Map out the data and resources that you will need in order to answer your questions, carry out your project/study, and achieve the desired outcomes.
- Consider other useful methods for mapping out your project/study, such as storyboards, outlines, and blueprints.

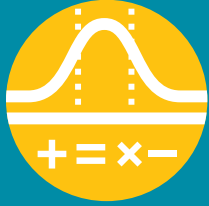
CONSULT

- If applicable, take your idea to experts, other arts organizations, teachers, students, and/or the artists themselves.

ASK QUESTIONS ABOUT YOUR PROJECT

This is important throughout the data design process

- How does this project fit into the larger context (meet your organization's mission)?
- Is this the right project for meeting the needs of your constituents (e.g. a specific school, a specific neighborhood, a specific art form)?



DATA DESIGN FRAMEWORK

DATA ACQUISITION

Don't just look for any data, look for specific data

- What data do you have? What data can you get from outside sources?
 - What data will you have to collect on your own?
- Design and administer surveys.
- Compile data into a useful format for analysis and sharing.
- Resources:
 - New artlookMap (beta.artlookmap.com)
 - CPS schools data (cps.edu/SchoolData/Pages/SchoolData.aspx)
 - US Census data (socialexplorer.com)
 - City of Chicago Data Portal (data.cityofchicago.org)

COMPUTE SUMMARY STATISTICS/ CONDUCT ANALYSIS

- Use simple statistics to provide insight and guidance, create meaning, tell stories, and generate recommendations.
- Resources:
 - [Infoactive.co/data-design](https://infoactive.co/data-design)

DATA VISUALIZATION

Consider how you can use visuals to share information

- Consider your data:
 - Time-series data v. cross-sectional data
- Consider your audience:
 - What is important to the viewer and what is their data experience level?
- Communicate data ethically:ⁱⁱⁱ
 - Do not manipulate a scale to magnify or reduce a contrast
 - Do not use a figure whose image distorts values
 - Do not make a table or figure unnecessarily complex or misleadingly simple
 - If a table or figure supports a point, state it
- Resources:
 - [Infoactive.co](https://infoactive.co)
 - [Annkemery.com](https://annkemery.com)

REPORT OUT

Use your data visualizations and summary statistics to share results

- Consider your audience and their priorities.
- Refer back to your project statement.
- Create a story: what were you trying to accomplish? Did this happen? How does the project/study fuel your organizational/departmental mission? What knowledge did you gain? What impact did your project have on key constituents? What are your key findings and/or recommendations? What are the next steps?
- Be honest and informative: share successes as well as opportunities for growth.

ⁱ Taken from IDEO's *Ground Rules for Brainstorming*

ⁱⁱ Adapted from Kate L. Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations*, 7th Edition

ⁱⁱⁱ Kate L. Turabian's *A Manual for Writers of Research Papers, Theses, and Dissertations*, 7th Edition