

Documentation for Teams

Why Documentation?

Documentation plays a key role in managing teams, developing efficient workflows, and carrying projects forward through various stages of the research process. Unfortunately (although understandably) sometimes documentation is neglected, as other project outputs are prioritized. Good documentation supports the following activities:

- Organization and communication among your team and yourself; increased efficiency
- Ensuring consistency and avoiding errors or the need to re-do work
- Publishing and sharing your work with the broader public
- Reflecting on work done and sustainability for future project work

Types of Documentation

There is no “one size fits all” structure for documentation for your team. The table below outlines a way to conceptualize three key types of documentation that you might need to generate during a project – documentation describing your data/items/objects, study/project, and administrative.

Levels of Documentation	Data/Item	Study/Project	Administrative
Describes...	<ul style="list-style-type: none"> • Content • Attributes • Measurements 	<ul style="list-style-type: none"> • Context • Methodology • Process 	<ul style="list-style-type: none"> • Workflow • Organization • Management
Examples	<ul style="list-style-type: none"> • Technical metadata • Codebooks • Data dictionaries • README 	<ul style="list-style-type: none"> • Lab notebooks • Protocols • User guides • Code • README 	<ul style="list-style-type: none"> • Project charters • Grant documents • File guides • README

Tips for creating documentation

Prioritize key information:

- What information is essential to record for project success and what is “nice to have”?
- Ensure the most important information is easy for team members for find.

Determine your audience:

- Who are you creating the documentation for?
- Tailor your tone based upon the audience. This can also help lessen the burden of creating documentation when less formality and pure functionality is the goal.

Integrate into your workflow:

- Consider designating specific times to review the status of key documentation and organization strategies (i.e., once a month, at specific project milestones, on/off-boarding members)

- Use tools that facilitate creating documentation within existing workflows and tools. Don't add un-needed complexity or new tools unless they solve a problem for your team.
- Be clear on the workflow for creating documentation but also be flexible!

Consider team members motivations:

- Documentation isn't always the most exciting aspect of research. Consider how you frame the importance of documentation.
- Highlight the benefits of documentation for the team and their future-selves. Appeal to their personal motivations to avoid documentation seeming like "extra work" and to build buy-in.
- Consider whether there is a team member that enjoys creating documentation and organization and empower them to be the team's "stuff management guru."

Remember it's never too late! Consider using specific project milestones to review existing documentation, add missing information, and re-assess organizational strategies moving forward!

Documentation Examples, Templates, and Resources

The documentation your team creates will vary based on your project but examples are always useful. Below are some general resources and templates for various different forms of documentation:

Standardized metadata: Often documentation comes in the form of spreadsheets, documents, or other relatively "unstructured" formats but in some cases there may be structured machine-readable metadata standards that could be used for data entry, vocabularies, etc. [This RDA list provides metadata standards by disciplinary area.](#)

README files: README files are a flexible type of documentation that are often in plain text format (although you could also use Word, etc. if formatting is needed). README files can be used to document internal organization and workflows or can be used when communicating with external audiences when materials are published/shared. [This README template from Cornell is designed to accompany data that is being publicly shared through a repository.](#)

Codebooks: Codebooks are primarily used to describe the "data level" information including variable definitions, value codes, etc. and in some fields are referred to as "data dictionaries." [This guide from ICPSR goes into detail on the creation of codebooks.](#)

Project charters: At the beginning of a project, each Bass Connections team is encouraged to create a project charter for establishing a shared understanding about the goals, roles and responsibilities, and overall project management. [The project charter template is available for download on this page.](#)

Within Duke University Libraries, we have staff that can help you think through your documentation and organizational strategies, contact us at askdata@duke.edu or askdigital@duke.edu.

**DOCUMENT ALL
THE THINGS!!!!**



(or at least the most important things)