

ARE YOU ANALYZING DATA?

Make It Easy for Yourself: DOCUMENT YOUR WORK AS YOU GO

Introduction: Why document it?

Documenting your work on a project has multiple benefits, especially for data management. It can produce a coherent record of your project's data cleaning, preparation and analysis – details that may be useful to remember as you work with the data or for later down the road when writing a paper or replicating the methodology for another project; it may even come in handy for dealing with issues that arise in the interpretation or use of the results.

IMPORTANT: Do not leave the documentation to do “later” when it has amassed into an intimidating, time consuming, memory mutating monster. Just do it as you go.

What needs to be documented and tools to do it

Documentation Tools

Project notes

Computer program code and comments

File directory structure and naming of files

Project status sheet

Codebook

Data collection instruments

Properties of data associated with the storage software

(i.e. spreadsheet, database manager, and statistical software)

Map of data file cabinets in the office

Objects that Need Documentation	Documentation Tools
Contents of data files	Codebook (if available) Data collection instruments Project notes Properties of data associated with the storage software (e.g. Excel, Access, statistical software) Computer program comments and code
Data collection procedures	Project notes Data collection instruments
Data prep procedures	Project notes Computer program comments and code
Files written in computer program code (syntax), e.g. SPSS, SAS, R	Information embedded in the code: header info, comments, titles for the output File directory structure and naming of files
Output from computer programs	Computer program code and comments File directory structure and naming of files
Location of electronic data files	Computer program comments Computer program code identifying library file path
Statistical procedures used	Computer program comments and code
Tracking progress of project	Project notes Project Status sheet
Location of hard copy data files	Office file drawer map

Tool Descriptions

Project Notes

Keep a journal of notes to document a project as you go. The notes are written immediately - or as close to immediately as you can get – after you become aware of new information.

- Take a little time after meetings, after discussions with anyone about the project, upon reception of pertinent emails or other correspondence to summarize the exchange in the journal.
- Document actions you have taken with regard to data handling or unusual characteristics of the data.
- Be sure to date each entry.
- Store the document in the root directory for the project.

Computer Program Code & Comments

Use titling capabilities of the software to

- Identify project and the main purpose of the computer program
- Include the program code file name on the output
- Include the run date of the program on the output

Write lines of comments in one section (I put this at the top of the program.) to record

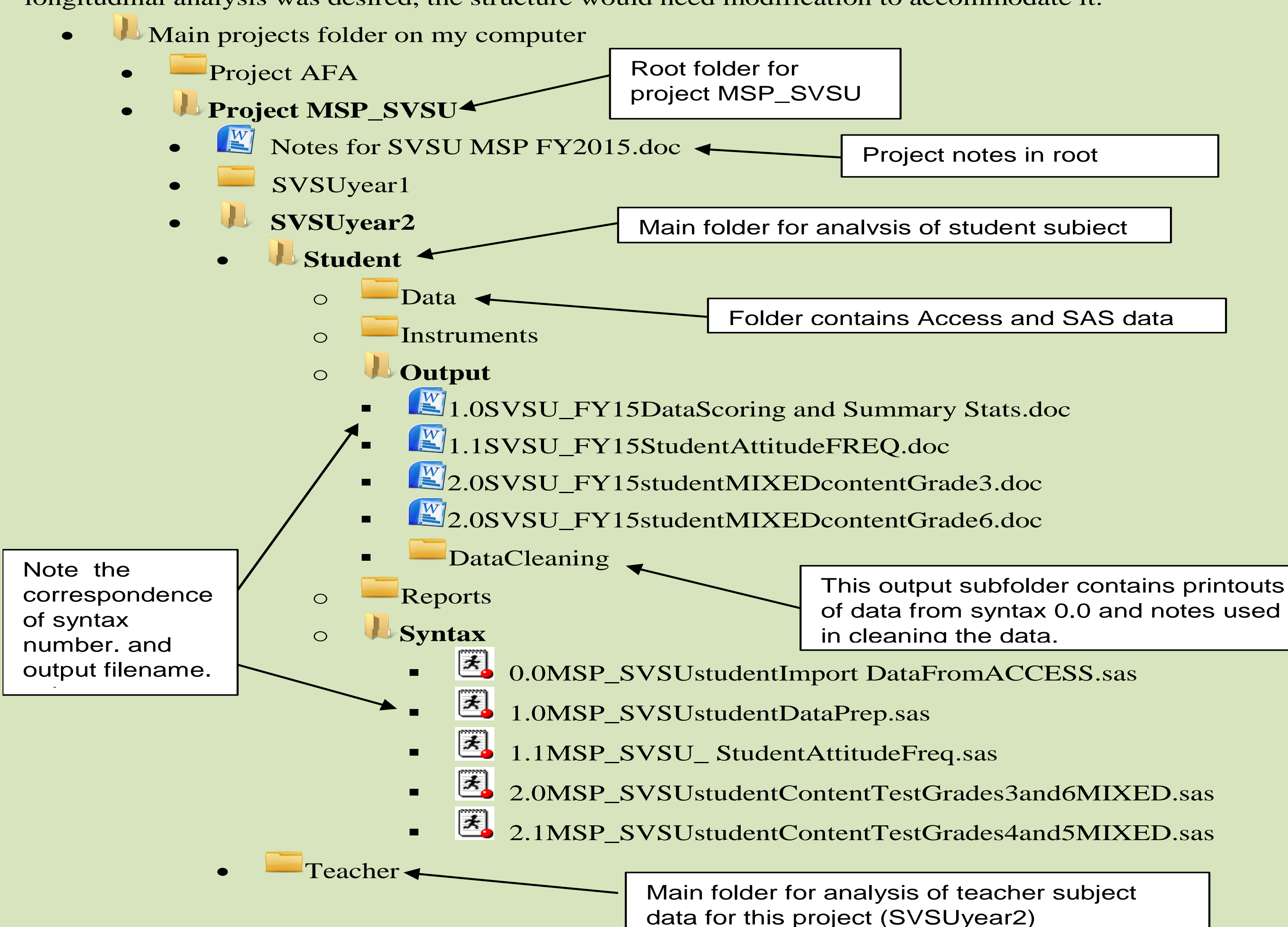
- Dates of creation and modification of the code
- Names of the data files read in and written out
- A description of what the computer program does
- Any special notes that may be helpful

In the body of the program include

- Additional title statements to describe the contents of the output for each section of the program
- Comments to illuminate the purpose or meaning of computer code

File Directory Structure & File Naming

The evaluation projects that I work on usually involve analysis of data collected from teacher participants and their students. This layout shows the general file directory structure setup for projects and some detail with respect to naming files containing computer syntax and output for one year of student data. In this project, even though the data are collected over multiple years, each year is analyzed separately. If a longitudinal analysis was desired, the structure would need modification to accommodate it.



Project Status Sheet

Keep a one-page form to keep track of the status of your projects. I keep mine tacked up next to my computer to be updated in pencil. Each line on the form refers to a particular project or task belonging to a project that I am or will be working on. Each line has a column to

1. Identify the project
2. Describe (very briefly) the work to be done
3. Columns for four dates:
 - a. Date of assignment
 - b. Due date (Date by which the work should be completed)
 - c. Date started (Date on which you started working on the task)
 - d. Date complete

A new line is added when a new project/task is assigned. An asterisk (in pencil) in the left margin next to a task shows which projects I am actively working on. When the form is full, the form is dated, filed, and a new form is started with typed entries from the old form for the projects/tasks that are still active.

PROJECT STATUS					Form Start Date _____	Form End Date _____
Project	Assignment	Date Assigned	Date Due	Date Started	Date Complete	