Paper 152-2019
20 Years of Success and Failure to Learn From, the Best and Worst
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ABSTRACT

Through 20+ years of SAS programming I have had my share of tips, tricks, successes and failures. I'm here to share with you some of my favorite Base SAS® programming tips and tricks which have helped me. In addition to this I will share professional development tips through the window of my past successes and failures. Communicating appropriately with others is a learned skill that can greatly affect your career. These are the things that you've either already learned or will learn the hard way like I did. For example, what radio station does everybody listen to? WIFM, "What's in it for me?" Talk and write so people know what info they need to get out of the message.

INTRODUCTION

I've been involved in SAS® programming for over 20 years. I started at the bottom as an intern and have been the director of a small CRO. Currently I am a Principal SAS® Programmer. Along the way I've had many successes and failures. This paper will highlight a few of them that will be covered in the presentation.

The presentation expands on these items with greater detail and humor. The paper is meant to highlight some of the key concepts.

SAS® PROGRAMMING – GOOD TIPS

Here are some quick one liners that are good tips.

Getting quick, focused prints of your data that show what you need is useful. Code like this can be used in Proc® print:

▶ Proc print data=db.abc **(drop= _: firstobs=22 obs=44);** run;

Using drop and/or keep statements helps programming performance, reduces log messages, makes debugging easier, reduces unwanted bugs, and makes output easier to read.

They are easy to put just about anywhere.

Inserting warning messages into your programs is very useful for future data that may never occur.

If x=y then put 'WARN' 'ING: (BOB) Add code for new data ';

Be sure to describe what action to take specifically to help yourself or others if it does ever occur.

Restrict data in your first step (or other early step) to save processing time, include a warning or date dependent clause to avoid forgetting about it later. Here is an example:

```
data aa;
set sashelp.class;
  if today() <= '18JUL2019'd then do;
    if name=:"A";
  end;
run;
```

SAS PROGRAMMING – BAD TIPS

Naming datasets and variables "cute" names seems like a fun thing at the time. Later it is not fun to figure out how to fix the program.

Using similar naming conventions for data from similar sources can be worse than the funny names. Use longer names that are more descriptive if you have several lab sources in the same program for example.

When adding a where clause or code that will delete records without a comment, you are likely to regret it later. Why am I deleting these records? Why did I select records only with that xxCAT?

COMMUNICATION – GOOD TIPS

Here are some of the best communication tips I've learned over the years:

- Take initiative, ask questions if you don't know.

- Be to the point with most people

- Give people the action you need from them

- Assume others know what they're talking about

    o Yes, even if they are annoying and have a bad reputation

- Search for your answer and provide the reader details

- Be a moderator

COMMUNICATION – BAD TIPS

Here are some of the worst communication tips I've learned over the years:

- When unsure of something, just ignore and let it go

- Tell the truth harshly to people

- Shoot down bad ideas quickly

- Declare that you are absolutely correct early on

- Don't read the details in e-mails sent to you

- Don't research before replying

SAS PROGRAMMING – GOOD STYLE

Some good programming tips:

- Use comments!

- Add section breaks in your code that are easy to see

- Organize and save programs that can be useful in the future

- Ask for help and ideas

- Use longer variable names that are more descriptive

- Be consistent over the years to recognize your own patterns quickly

CONCLUSION

Hopefully some of these tips will help you to achieve better success in your career and avoid a few pitfalls along the way.

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