Introduction

If programming and research assistants were taught SAS essentials, job efficiency could be maximized with the ability to use SAS as a tool to do their own preparatory work for assigned tasks. This paper summarizes a supplemental training program which teaches basic SAS programming skills to enable support staff to be more independent.

The purpose of this seminar is not only to teach how to do things, but also to provide a toolkit of essentials for new and infrequent users. Spending time with your employees while they explore SAS is the most economical way to teach basic users the skills they need to complete daily tasks. The ability to navigate various windows allows your novice user to be knowledgeable about their data. As new data sets are created they can be checked and errors detected within reasonable time frames.

Summary

The SAS slogan is ‘the power to know.’ When working in SAS it is important to remember that there are many ‘right’ ways to complete a task. SAS programming is a creative and iterative process designed to empower the user. One’s personal style evolves over time. How to solve a data mystery or accomplish a data driven task is ultimately an independent decision made by the user.

The SAS Essentials training program is an easy course to implement for those who want their support staff to succeed and excel at interpreting, processing and summarizing data. Blending the idea of efficiency, empowerment and ultimately self-management is an opportunity for supervisors to fully utilize the time of all their staff and create a successful and productive team.

1. Navigation – maximize efficiency by utilizing the simple tools SAS provides upon opening the product

2. Import Procedures - is an easy and efficient way of putting external data into a SAS dataset.

3. Data Exploration - The best way to become familiar with a foreign dataset is to begin with a PROC CONTENTS.

   PROC CONTENTS DATA = 'Z:\practice1'; RUN;

4. Data Step - Data steps are written by the programmer and are utilized to create new data sets of two kinds: temporary and permanent.

   Temporary: DATA Y; SET X; RUN;

   Permanent: LIBNAME X 'Z:\JKMH\SAS 2013\data'; DATA X.PRACTICE1; SET XYZ; RUN;

5. Reading the Log - The log is documentation of everything you have done during your SAS session.

6. Procedures – Allows the user to manipulate and view data in many ways.

   PROC SORT DATA = X; BY ID TDM; RUN;

   PROC PRINT DATA = X D LABEL;ID ID;BY TOWN;RUN;

   PROC FREQ
   Creates multi-way crosstabs or cross-listings of variables listed in the TABLES statement.

   PROC FREQ DATA = X; TABLES STOVE_TYPE; RUN;

   PROC MEANS
   Prints the contents of the specified dataset in the output window; options allow the user to change the visual appearance.

   PROC MEANS DATA = X; VAR PPB_IN; RUN;

   PROC PRINT
   ‘Prints’ the contents of the specified dataset in the output window; options allow the user to change the visual appearance.

   PROC PRINT DATA = X D LABEL; ID ID; BY TOWN; RUN;

   PROC MEANS
   Provides number of observations and calculates descriptive statistics such as mean and standard deviation.

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