

Supporting SAS* in an Academic Environment
Nancy J. Hill, Central Missouri State University

Introduction

In an academic environment the SAS consultant in many cases is someone who suddenly finds they are delegated the duty because of their job position or because they have shown an interest in SAS. After all how many people do you know who actually volunteer to take on the site's software support. Many times this person has no formal training in the use of SAS. At some sites the SAS representative is an expert in the site's operating system and may not use SAS at all. If the consultant is lucky the site has SAS/ASSIST* or SAS/AF* to make the system more user friendly.

In the times of budget cuts, it is hard to find ways to support people, making them fully aware of the capabilities of application development tools such as SAS. I will attempt to outline some steps which can help the application developer, the end user and the SAS consultant to use their time more efficiently.

The resources, correctly mixed, which determine if the experience of using SAS on your campus will be satisfying or confusing follow:

- Public Relations
- User Group Involvement
- Access to Educational Material
- Access to Training
- Networks

Public Relations

The first step in making people more self sufficient is to make sure they are well informed. In order to do this one must publicize the opportunities available to them. Make use of department newsletters, the campus newsletter, student newspapers and electronic mail. Post announcements for training sessions, system upgrades, and new features in every type of free publication available to you. If you only reach one person for a posting you still may have helped many. That person can inform and train peers, students in their area or office co-workers. How did you find out about this conference?

User Group Involvement

Form a local in-house users group. This does take effort but will pay off in the long run, think of it as a SAS support resource. Try to get all areas on campus involved not just academics or management. Don't overlook the students. Remember students are potential future faculty, graduate assistance and staff. Make sure you include people from the Graduate School and the research area. These people are potential heavy users of SAS.

A user group is a good place for application exchange, problem solving, and people networking. Contact Sally Roberson at SAS Institute for more information on becoming a recognized local in-house or special interest group. SAS will help groups with external speakers. Members can demonstrate applications, talk about various solutions to problems, or discuss changes, training sessions available, or publicize events. You can also make sure people know about funding opportunities such as research grants, or scholarship available. If you are a recognized SAS user group, you will receive a copy of the SAS User News video each quarter.

By contacting SAS Institute you can receive copies of videos about new releases, new products or overview information about existing products. These tapes can be viewed by the user group to make them more aware of the capabilities of SAS or give people new ideas for projects using the SAS system. SAS Institute has videos available of a variety of SAS products. If you site is considering licensing additional products your user group can give the computer services administration valuable input on possible applications or needs. Contact your SAS Institute marketing representative for more details.

Make a member list available including such information as products used, operation system, expertise level (beginner, intermediate, and advanced) , type of member (end-user, application programmer, systems, consultant) along with the interest area. Don't forget to note PC, Mainframe, or both usage. Note who is available for consulting assistance and in what products.

A list of area SAS users groups should also be available for members to find contacts off campus for advise about various applications or projects. Become involved at various levels such as local group, area group, and regional group. You might find groups willing to exchange speakers at meetings. Rotate meeting sites on campus to give a feeling of equals, this also encourages everyone to become involved, making it easier for people to attend. The SAS consultant should not control the group but instead advise them. This encourages every level of user and area to become involved.

The typical agenda might include problems/issues, suggestions to encourage efficient use of SAS, new changes or releases, demonstrations and the SAS User News video. Writing an on-campus SAS user guide is a good project for the group. This guide will help various SAS users find local information and help the members build a peer support group. It should include information not available in SAS manuals such as how to access your system, how to access SAS, where to get assistance, what a SASLOG is, accessing help files and the training available not only on campus but also from SAS Institute and private consultants. You may wish to consider standards and include tips or hints.

Make use of electronic mail systems available to you for announcements of conferences or meetings, exchange of documents, problem reporting and solving.

Access to Educational Material

Make the SAS manuals available to all campus users in a easy access library, include copies of the Master Index, SAS Communications* (pointing them to the technical support question and answer section, and the tips & techniques section), don't forget the SUGI and MWSUG Proceedings. The user group can develop a list of manuals available through members for viewing along with a brief description of the manual, order number and price. It is also a good idea to keep a copy of the publications catalog where everyone has easy access. Include the SAS User News videos along with the new release feature videos. If your site receives the magazine Observations* make sure it is included in the SAS library. Authorline* is a publication that includes information about books written about using SAS by users.

Before you can use SAS you need to know site dependent information. For example, on the mainframe, where do you get a logon, how do you logon, how do you invoke SAS, etc. Knowing how to access on-line help files, the usage notes, or temporary disk space is important for solving problems. With SAS release 6.07 the users can now look up SAS manual information.

The use of prototypes can reduce the number of problems for inexperienced or new users. SAS release 5.18 has prototypes for SAS/OR*, SAS/ETS*, and Report Writing. For SAS release 6.06 with SAS/OR, you install PROJMAN and use it not only for Operation Research but also use the tutorial for helping people to get started with SAS. It has some good help files and mentions some manuals to use for further research on various parts of SAS. There is also an experimental Decision Analysis procedure call DTREE that uses SAS/OR. This procedure interprets a decision problem represented in SAS data sets, finds the optimal decisions, and plots on a line printer or a graphics device tree showing the optimal decisions.

Make sure you keep up-to-date on your usage notes so when problems arise you can see if it is a known problem with a fix. The SAS online help facility with technical support at SI is also available for consulting. If you have access to the BITNET or Internet network, you can use TSNEWS-L, EMITS to keep you up to date on problems. The UICSTAT archives make current usages notes available.

Access to Training

Don't forget about training. Members of the user group could assist with training. Copies of training documents, along with user guides for various should also be included in the SAS library. Offer SAS courses 3 times a year to match various needs. Try to cover different levels, such as beginners (data step, basic procs, and simple graphs), advanced course (covering efficiency techniques), SAS/GRAPH*, and SAS/FSP* if available.

Computer Based Training courses can be developed with the SAS/AF software, or purchase SAS developed CBT courses. Video tapes are available on various topics. Another option is to use the Audio Visual Department on-campus to tape the workshops held at different user group meetings to be used for independent study.

SAS/TUTOR* is online CBT offered through SAS Institute. Various courses are offered including the Fundamentals of SAS,

It is also important to make use of the seminars offered on-campus such as electronic mail to assist in the use of SAS-L, TSNEWS-L, and the EMITS system. Courses offered on the use of networks such as BITNET or Internet can make users more independent.

Networks

Make use of bulletin board systems both on campus and off to post hardware questions, looking for SAS applications, training, how to questions, and connecting other software to SAS type questions. If an on campus bulletin board system does not exist (or even if it does) look to ones such as Cleveland Freenet. It contains a section for use of SAS. Also look for special bulletin board systems. For example, our university is a member of KCRCHE (Kansas City Regional Council for Higher Education) which has it's own bulletin board system.

If available, make use of special networks such as BITNET, INTERNET and state networks. These networks have discussion groups which you can subscribe to and use for information gathering, question/answer activity, comparing the use of applications or products taking place at other institutions in class, course work and similar departments/positions. Questions can be sent to the lists for opinions on products, known problems, performance, or correct usage. Useful groups on BITNET include (but not limited to) are SAS-L (for SAS on all operating systems and equipment), STAT-L (for statistical consulting), TSNEWS-L (the new technical support electronic mail system from SAS Institute) and PSTAT-L (statistics and programming). Others are available on INTERNET and other networks.

TSNEWS-L and EMITS (Electronic Mail Information for Technical Support) are SAS Institutes's technical support available by using electronic mail through BITNET and Internet to make sites aware of problems and fixes or used to reported software problems.

SAS-L is a discussion group made up of people through out the world. It is now a recognized user group. It is good for solving problems, finding out about conferences and finding out how others are supporting SAS.

Currently some states have networks available such as Missouri's MOREnet (Missouri Research and Educational Network) tying the state university and research center computers together then going out to major networks. This project was partially funded by a NSF

grant.

Summary

Make use of the resources at your site to make supporting SAS a successful experience. Resources include the users, manuals and the equipment. Don't try to do it all yourself. Delegate such tasks as publicizing activities, writing documents, and training to the other users and interested people on campus. Make use of user groups locally, in the area, the region or international. Don't forget that SAS Institute will assist you in making the most of their products by supplying videos, documents, contacts, etc.

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Author

Nancy J. Hill
Academic Coordinator
Information Services
HB221
Central Missouri State University
Warrensburg, MO 64093
BITNET: HILL@CMSUVMMA INTERNET: HILL@CMSUVMB.CMSU.EDU