Building a Network of SAS Users for Education and Technical Support

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Introduction

The evolution of SAS usage within a corporation falls into three basic stages: beginning, middle, and advanced (figure 1). The beginning stage follows the installation of the SAS Basics package and is characterized by first-time users who depend largely on individual efforts to design and debug their programs. The emergence of experienced users who train and provide technical support to others marks the middle segment. Advancing beyond this segment requires a corporate effort to centralize SAS education and technical assistance by hiring a full-time support staff. When it is difficult to fund a full-time staff, the user network is an alternate educational and support vehicle for moving a corporation toward the advanced SAS level.

The Education of SAS Users within a Corporation

A fundamental corporate goal is to shrink the relative time and effort necessary for SAS users to reach beyond the novice level and grow to the experienced and expert levels (figure 2). The SAS user network supports this goal by reinforcing SAS coursework with tutoring, seminars, and briefings (table 1).

SAS Institute, Inc. products provide valuable support to networks lacking sufficient manpower and expertise to meet users’ educational needs. Depending on subject material, cost, flexibility, and versatility requirements, a corporation can arrange for SAS in-house training or for SAS video training. On the other hand, networks with the right size and background have the ingredients to provide SAS training at a corporate or one-on-one level.

For SAS users to evolve, a network must plan for continuing education through seminars and briefings. In-house seminars provide the right atmosphere for cross-fertilizing knowledge:

• Through the Sharing of Novel Approaches to Problems
• By Disseminating Information on Companywide and Other Data Bases
• SAS Program and Format Libraries

In addition, informal briefings on new releases and enhancements provide a quick way to update users on the latest features SAS has to offer.

Taken together, courses, tutoring, seminars, and briefings from the cornerstones for increased SAS productivity through user education. A corporation must ultimately hire full-time staff to provide this user education if it expects to meet the ever-increasing demand for strategic information.

Starting a SAS User Network

The scope and purpose of a SAS user network depends both on the evolutionary stage of a corporation and user expertise. Without a full-time support staff the network must assess its ability to provide both education and technical assistance to the SAS user community:

• Are there enough experienced users to provide support without detracting from their main job functions?

In contrast, the presence of a full-time support operation, like an information center,1 frees the network to concentrate on seminars and briefings.

There are four key points in molding a SAS user network that balance individual needs against the availability of full-time support (table 2):

• Identify Experienced and Expert SAS Users to Anchor the Network
• Spread Responsibilities
  Course and Seminar Development
  “On Call” Hours for Assisting Users
  Rotate Assignments
  Tutors for Novice Users
  Designation of Leaders to Consult with during Lengthy Projects
• Stress Flexibility
  Tailor Network to Balance Corporate and User Needs
  Available Time of Network Members
• Maximize Communication
  Have Informal Breakfast and Luncheon Meetings
  Hold Briefings on Current User Projects and Enhancements to SAS Packages

For the network to provide educational and technical support to the user community, spreading work among experienced SAS users is a must. Otherwise, the burden of this support falls unduly on one or more individuals. The purpose of the SAS user network is to maximize productivity through communication and education not to divert the focus of anyone’s responsibilities.

Conclusion

Building a SAS user network provides a catalyst for productivity through communication and continuing SAS education. And, with its inherent flexibility, the network is a viable entity throughout the evolutionary course of SAS usage within a corporation.

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Figure 1
Evolution of SAS Usage within a Corporation

**Advanced Era**
- Centralized and Full-Time Effort for Education and Technical Support
- Further Productivity Gains from Well-Rounded Skill Development and Minimized Duplication of Programs and Data Bases

**Middle Era**
- Experienced Users Begin to Train Novice Users
- Expanded Communication Improves Productivity and Speeds Skill Development

**Beginning Era**
- Each User Responsible for His/Her Own Education
- Lack of Communication between Users Slows Skill Development
Figure 2
The Growth of Users' SAS Expertise

Level of Expertise

- Novice
- Experienced
- Expert

Relative Training Time between Expertise Levels
### Table 1

**Educating SAS Users within a Corporation**

<table>
<thead>
<tr>
<th>Initial Education of SAS Users</th>
<th>Continuing Education of SAS Users</th>
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<tbody>
<tr>
<td>• SAS Institute, Inc. Sponsored Training Courses (Off-Site or In-House) Videocassettes</td>
<td>• SAS Institute, Inc. Sponsored Training Courses Videocassettes</td>
</tr>
<tr>
<td>• In-House Developed Training Courses Individualized Tutoring</td>
<td>• In-House Developed Training Courses Seminars Briefings on New Releases and Enhancements Newsletter</td>
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</tbody>
</table>

### Table 2

**Key Points in Starting a SAS User Network**

<table>
<thead>
<tr>
<th>Identify Experienced and Expert SAS Users</th>
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<tbody>
<tr>
<td>Divide Responsibilities</td>
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<tr>
<td>• Share Course and Seminar Development</td>
</tr>
<tr>
<td>• Divide &quot;On-Call&quot; Hours for Assisting Users</td>
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<tr>
<td>• Develop Assignment Rotation for Tutoring and Consulting</td>
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<th>Stress Flexibility: Tailor Network to Balance</th>
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<td>• Corporate Needs</td>
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</table>
Footnotes

1. This coursework can be developed by the user network or provided by the SAS Institute, Inc.


3. Ibid., pp. 41-43.

4. Loosely defined, the “right” size network can provide educational assistance without detracting from people’s main job functions. Network members with the “right” background have the expertise to design and teach SAS courses. The SAS Institute, Inc. provides free assistance in developing training programs by phone or at the SAS/Curriculum Workshop in Cary, NC. C.f. “SAS/Curriculum” (September 1982).