ABSTRACT

Many papers are prepared with high levels of product knowledge but with a wide range of style. This paper appeals to authors of papers on the use of the SAS® System to include a high level of professionalism in the preparation of a paper for publication. The paper will focus on an array of much misused points of grammar and expression that are recurrent in the SAS user community. Elements of this array include construction of headings, simple and frequent grammar oversights, verb inflection, applicable sections within a paper, and published appearance of the final paper. While strong, in-depth and lengthy sources are available to assist a potential author, the reader of this paper will be exposed to a short account for producing a SAS paper while paying attention to those elements that many authors have easily and frequently overlooked.

INTRODUCTION

A publication produced for presentation at a SAS users conference may take the form of an oral presentation or a poster while a final paper associated with either form of presentation will be included in the Proceedings. This article will focus largely on the production of a paper, however, most sections would apply to a successful poster presentation or to the projected displays of an oral presentation.

Since the papers published in the Proceedings of SAS users’ conferences are nonrefereed, the author becomes wholly responsible for content and form. Although some have authored papers that are a step away from a comedy script, there is every reason to preserve a sense of professionalism that will reflect well upon one’s person, profession, or, in some cases, one’s employer. Professionalism requires attention to form in addition to content, and, whereas humour, for example, may be acceptable in this forum, it should be presented with taste.

TITLE

The first notion that a potential reader would perceive of an author’s work is in the title. An unattractive or uninformative title would most likely not draw a reader despite the high quality of the content of the paper. The title should be brief—it should not take too long to read since a reader would be perusing a list of titles from which to select a few as worthwhile. The title should be attractive—it should entice the reader to want to find out more. The title should be informative—it should provide sufficient information so that the reader would derive the concept of the paper. In some instances, however, a long title may be unavoidable.

SECTIONS

PRELIMINARY SECTIONS

Following the title, the body of the paper could be partitioned into a number of sections. The first should be an abstract, followed by some delineation of what the paper would be about, that is, an introduction. In the abstract, the author would briefly note the highlights of the introduction and the body of the paper, and the more salient points of the closing sections that are described below. The introduction is the author’s means to hold the reader’s interest: to present the problem for which a SAS solution was developed, or to present the reasoning behind some SAS-based methodology. Next comes the body, a section or sections in which the author explains the procedures relating to the concepts presented in the introduction. This could be a method or a methods section.

* The acronym, SESUG, means SouthEast SAS Users Group, Inc., and the acronym, SUGI, means SAS Users Group, International. These are wholly independent organizations with a mutual interest in the promotion of skills of the users of the SAS® System.
BODY SECTIONS
Most SAS papers would be technical and the author would show how a particular SAS solution was applied to solve a problem. On the other hand, the author may show how SAS was not successful. Another type of paper may require the author to show how the use of the SAS System resulted in the implementation of policy at some management level. Some papers are tutorial and in the body, the author would describe and illustrate how a particular SAS PROCEDURE or SAS-based methodology was used. Another aspect may be a description on how the SAS System was applied or used in training or professional development where the content is not technical. In most cases, the body could be entitled “Method” or “Methods” as is appropriate. The author may choose to subdivide the body into subsections depending on the length of the paper. These subsections would hold together more distinctly, those points of discussion that are more conceptually similar, for example, if more than one method were being discussed in the paper, there could be two subheadings entitled “Method 1” and “Method 2”.

CLOSING SECTIONS
To close a paper, the author should write some combination of results, summary, and conclusion. The nature of the paper would determine how this closure would be arranged. A results section should include statements that illustrate the outcome(s) from the procedures described in the body. The summary would bring together the main points detailed in the introduction, the method(s) and the results. The conclusion would illustrate benefits and costs, or advantages and disadvantages from the results of the procedure described in the body. Some authors use combinations of these three in one section such as, for example, RESULTS AND CONCLUSION, or SUMMARY AND CONCLUSION. At the end of the sequence of closing sections, the author should include a section listing any references from which the author had derived information that was used in the development of the paper.

POSTCLOSURE SECTIONS
Among the final sections that do not pertain to the paper proper, the first could be used to make personal acknowledgements. The author is guided to use this section at liberty but to retain a sense of professionalism. The author could express gratitude, for example, to individuals who had contributed in some form to the success of the publication, for example, family members who may have received little attention during the development and completion of the publication, or colleagues who had provided critiques of the work. Second, there would be a section with no mandated heading that is a SAS-authorized disclaimer and recognition of trademarks. This is a critical inclusion in any paper and should not be omitted. Finally, the contact information of the author would bring the publication to a close. The information provided would include the name of the author and any or all of the following: a mailing address, telephone numbers for vocal communication and facsimile transmission, and an electronic mail address.

APPENDICES
Many authors, who choose to include large segments of SAS code, may place such code in one or more appendices. These appendices are acceptably placed after all sections including the contact information. A long series of screen prints, for example, from the SAS output or SAS log windows, may also be placed in appendices so as not to clutter the body of the paper or detract from the essence of the body of the paper. Although appendices may arguably be considered a closing section, their inclusion could be made at the very end so as to preserve the visual connection between the content of the paper and the author’s contact information.

HEADINGS
Headings and blank lines should be used to separate main sections of the paper. Subheadings could be useful particularly if the body of the paper is lengthy. Fonts should be carefully selected so that it would be clear as to which is a heading and which is a subheading.

Proper headings should be single words or very short phrases. If single words are used for headings, subheadings may be two- or three-word phrases. If short phrases are used for headings, then longer phrases would be expected for subheadings. In general, subheadings should bear more information than a heading. One would not expect to find verbs in a heading, that is, headings or subheadings should not be complete sentences.

SYNTAX
TRADEMARK SYMBOL
Perhaps the first item to note is the registered trademark symbol, ®, which should be used at least upon the first mention of the word “SAS”, usually in the abstract, as in “The SAS System was used to solve the problem.”
Subsequent mentions of “SAS” without the registered trademark symbol are acceptable as long as “SAS” does not represent any other enterprise such as a food service company, a shoe store, or an airline.

**VERB INFLECTION**
Grammar should not be sacrificed and verb inflection thus becomes a critical consideration. Whereas refereed papers generally would be written in the third person, imperfect past tense, passive voice and not the first person, nor in the active voice, SAS advocates the second person, active voice. Thus, for example, this author would use

“Step A was written then implemented.”

rather than

“I wrote Step A first. Then I ran the job.”

while SAS would support

“You write Step A first then you run the program.”

**WORD CONTRACTIONS**
Contractions should not be used: forms such as “don’t” and “there’re” should be spelled out as “do not” and “there are”. Colloquialisms or slang expressions should be avoided, but if used, they should be set apart in quotation marks. For example,

“The CONFIG.SAS file was amended to present the greeting “WAZZUP!” upon launching a SAS session.

**HYPHENATION**
Hyphenation is often overlooked for the sake of popular incorrect usage particularly when an adjective and a noun are compounded to form a compound adjective. Consider for example, the statement

“A short-term planning horizon clearly offers no perspective for the long term.”

This illustrates when hyphenation is appropriate between two words that are commonly used together, “short” and “term”, or “long” and “term”. The term, “short-term” is a compound adjective that modifies “planning horizon” while in the expression “long term”, “long” modifies “term”. The following statement is given as a second example,

“This paper was presented within 30 minutes to one hour at the annual one-day conference. Then the two- or three-hour drive back became a 12-hour nightmare when the blizzard hit.”

Here, any number greater than unity requires a following plural noun, e.g., “30 minutes”, while any plural number may be compounded with a singular noun, using a hyphen, to form an adjective, e.g., “three-hour”, or “12-hour”. Furthermore, numbers between zero and ten, inclusive, are spelled out while numbers greater than ten are enumerated, e.g., “one”, “two”, “three”, “12”, “30”. When appearing in a series, compound adjectives may be broken, that is, the noun portion may be dropped but the hyphen is still to be retained in all truncated elements of the series, e.g., “two- or three-hour”. All these aspects are illustrated in the example above: plurality of nouns following a number greater than unity, singularity of nouns in a compound adjective, hyphenation in a compound adjective, spelling out of numbers less than ten, and retention of the hyphen when breaking compound adjectives in a series.

**SAS CODE CONVENTIONS**
Since most SAS papers being presented to SAS users are technical, the use of SAS code in the body is an imperative. It is also recommended that some standard be adhered to when including SAS code in the body of the paper. The recommended standard would be the same as used in SAS Institute publications. Some examples include (i) capitalization of SAS keywords, or all SAS code; (ii) use of the symbols '<' and '>' to delimit text to be keyed by the user; (iii) use of lower case italics within the delimiters mentioned in (ii), above, to denote text to be keyed by the user; (iv) use of the symbol '|' as a separator between pairs of two or more options that the user may select from. Capitalisation works well for short pieces of code but for much longer segments of code, or for code presented in appendices, it may be impractical to use the SAS standard. However, when any such code is presented in the body of the paper, then it may be set apart as an illustration, that is, delimited by a header line and a footer line and appropriately entitled. In refereed papers, tables are titled at the top while Figures and Illustrations are titled at the bottom. Some authors present their code in appendices at the end of the paper. This is more appropriate for very long pieces of code or whole programs.

**PUBLICATION GUIDELINES**
SUGI does offer more structured guidelines on preparing a paper and a presentation. These guidelines become accessible to a presenter when his or her paper has been accepted for presentation at SUGI. Authors whose work has been accepted for presentation at SESUG would be afforded the SUGI guidelines.

**GRAPHICS**
Some papers may be improved with the inclusion of tables and colour graphics, as produced by SAS/GRAPH. Such papers take on a new look in Proceedings on a CD as compared to the historic black-and-white appearance of printed proceedings.
A flow-chart is a useful tool for papers that describe a procedure or a series of events. Care should be taken to ensure clarity in the use of artwork especially arrows. Points of origination and destination should not be left to the reader’s interpretation.

Screen prints can be very helpful since the reader is afforded a visual depiction of important details that may not be presented in the text. Since the Proceedings are now produced on CDs, colour becomes an important attractive facet of screen prints themselves and would afford the reader a more alluring perspective of what to expect from the principles presented in the text, for example, illustrating screen displays that pertain to a SAS application or to output form that may be important.

LAYOUT

MARGIN DEFINITIONS
Now that the elements of a typical paper for publication in the Proceedings of a SAS conference have been reviewed, it would be useful to consider how such a paper would be laid out. As in the era of printed Proceedings, authors are encouraged to format their papers to a standard defined by SUGI. This means that the title page would carry a 1½-inch top margin while remaining margins would be 1 inch. All other pages would be defined with 1-inch margins. Page numbers would be set at ½ inch from the bottom of the page.

TITLE LINES
The title line would be followed by the name of the author(s), the affiliation(s) and their corresponding location(s). Personal titles and abbreviated academic qualifications are generally omitted. Since the omission of personal titles from the author’s name, in the English-speaking society, could present a problem to identify the gender of authors with non-English names, the use of personal titles may be allowed in such cases. The purpose for identifying gender is to facilitate correspondence with the author by a user interested in further discussion of the author’s work.

COLUMN ARRANGEMENT
Authors are currently encouraged to produce single-column papers that are more conducive to publishing on a CD. Formerly, authors were encouraged to set their papers up in a bi-columnar fashion for publishing in the printed Proceedings, and this is not currently disallowed. There is aesthetic appeal to the bi-columnar layout but there are drawbacks, particularly with large or complex illustrations that need to span the width of a page. Laying out an image in such a way would introduce the complexity of how to order the text in the columns preceding and following such an image. The length of the paper would also be impacted and could become a concern of the author since numbers of pages were limited and enforced by SAS’ printing office. On the other hand, images constrained to the width of a column in a bi-columnar layout often may be indistinct to the reader. With the advent of desktop publication, inclusion of screen prints have become a more favourable option in SAS papers but elucidation of detail could only be enhanced with either larger images or images not constrained to fit within the width of a column in the bi-columnar layout. CD publication of Proceedings ameliorated the restriction of numbers of pages and authors were allowed more pages at least for SESUG publications. Discourse more easily flows around images that span the full width of a page in a single-column layout.

REVIEW
Any author could not discredit the value of a review of the work by colleagues. Concepts that may have been clear to the author at the time of writing the paper, may not be as clear when read by the intended audience. In addition, while some software publication tools offer a spelling check feature and a syntactical check feature, these tools are not foolproof—there are some issues or concepts that may elude the available system. Comments returned by colleagues may raise questions the solutions to which the author may want to incorporate in the paper before submitting to SESUG or SUGI.

SUMMARY
SESUG and SUGI each provides a forum for the dispensation or promulgation of principles and practices that involve the SAS System, and where the practitioners or presenters and the intended audience would be users of the SAS System. Professionalism is an integral element for any presenter both in the method of delivery and in the formal document upon which the presentation is based. It is the intent of this author to offer some guidelines on the more critical components of a paper that this author has been witness to where authors spend little time or tend to ignore with a subsequent loss of professionalism. These more critical areas include the partitioning of the paper into logical sections with meaningful names; proper use of headings at different levels; syntax including hyphenation,
representation of SAS code, and inflection of verbs; and a review of the paper before final submission. With more thought given to these elements, an author could expect to have a professional paper published in the Proceedings even though there may not be refereeing of the paper.

REFERENCES


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