

# **Statistics Education Research Journal Guidelines for Authors**

ISSN: 1570-1824

# 1. OVERVIEW OF JOURNAL POLICIES AND GOALS

The *Statistics Education Research Journal* (SERJ) is a peer-reviewed electronic journal of the International Association for Statistical Education (IASE, <u>www.stat.auckland.ac.nz/~iase</u>) and International Statistical Institute (ISI, <u>www.cbs.nl/isi</u>). SERJ is published twice a year (May, November) and is free. SERJ aims to advance research-based knowledge that can help to improve the teaching, learning, and understanding of statistics or probability at all educational levels and in both formal (classroom-based) and informal (out-of-classroom) contexts. To achieve these aims, SERJ seeks to publish high-quality papers that describe new research or analyse published research and that can contribute to scholarly knowledge and educational practice in statistics education, broadly viewed. All papers are blind-reviewed by at least two external referees.

Contributions in English are preferred. Contributions in French and Spanish will also be considered. A submitted paper must not have been published before or be under consideration for publication elsewhere. Authors are asked to read this document in its entirety, including the Appendices, and follow all guidelines regarding manuscript preparation in section 4.

This document includes the following main sections:

- Section 1. Overview of journal policies and goals
- Section 2. Audiences and types of papers accepted for publication
- Section 3. Submission, refereeing, and publication processes
- Section 4.. Manuscript preparation and formatting
- Section 5. Final reminders and advice
- Appendix 1. More on duplicate publishing
- Appendix 2. More on editorial decisions and referees' criteria

# 2. AUDIENCES AND TYPES OF PAPERS ACCEPTED FOR PUBLICATION

Papers submitted to SERJ should be relevant to the Journal's aims described above and to its readers. The intended audiences are those engaged or interested in research on any aspect of statistics education or learning, and those wanting to use the results of such research to inform educational practice or improve the understanding of statistics in diverse contexts. Such readers may be involved directly in research or practice in statistics education, and/or have interests in related fields such as in statistics, mathematics or science education, teachers' professional development, psychology and social sciences, measurement, natural and health sciences, engineering, business, management, public services, official statistics, and others.

Below are descriptions of key types of papers of interest to SERJ (Section 2.1), followed by guidelines for manuscript length (Section 2.2), and points regarding duplicate publishing (Section 2.3).

#### 2.1. PAPERS OF INTEREST TO SERJ

In general, SERJ seeks reports of original research, integrative and critical reviews of research literature, and analyses of research-based theoretical models and methodological approaches related to teaching, learning, understanding, or assessment regarding statistics and probability. Such research may examine, for example, cognitive, epistemological, motivational, attitudinal, curricular, teacher- or teaching-related, technological, institutional, or societal factors and processes that are related to the development, understanding, and improvement of stochastic knowledge. Along the same lines, research may focus on how people, e.g., school or college students, educators, workers, managers, specialists, or adults in general, think about, use or apply statistical and probabilistic information and ideas, broadly viewed.

Manuscripts can address research related to learning and teaching of statistics and probability in classroom-based contexts at primary, secondary, post-secondary levels and adult education programs. However, learning and usage of statistics and probability occur in many types of out-of-school contexts, such as in the workplace, at home, or as part of societal or consumer activities. The growing availability of computers, and the growing dissemination of statistical information via the Internet by diverse organizations in the public, private/business, and non-profit sectors, further contributes to blurring of traditional boundaries between formal and informal contexts of learning and using statistics. People of all walks of life, not only "pupils" or "students", engage with diverse tasks and situations where knowledge of statistics or probability, however acquired, is called for and put to use. Teaching, learning, and using of statistics are thus increasingly intertwined and are seen as occurring within a broad social sphere. Therefore, SERJ also encourages papers that address research on an expanded set of issues related to improving the way people develop knowledge of statistics and probability, or understand and use statistical and probabilistic information, in both formal and informal contexts.

Three key types of papers are described below: *Reports of original empirical research, Conceptual essays,* and *Brief reports.* Authors wanting to submit other types of papers, e.g., reactions to papers published in SERJ, are asked to send an inquiry to the editor.

**Reports of original empirical research.** Such reports can describe diverse types of studies of a quantitative or qualitative nature. Examples are observational, experimental or quasi- experimental, teaching experiment, case study, ethnographic, phenomenological, survey, or meta-analytic studies on any of the areas described above. Interim results from ongoing studies may also be submitted, if their scope is adequate.

A research report should: Clearly describe the research goals; review relevant literature; describe the research questions and the rationale for studying them; describe and justify the specific methodology used to address these questions and the research context, i.e., study design, nature and number of respondents or units of analysis, description of population sampled and/or treatments assigned, instruments, data collection procedures, and analytic methods. The report should present findings related to the research goals and questions; discuss the findings and how they help to answer the research questions; acknowledge limitations of the study and its results; present conclusions regarding the paper's contribution to existing scholarly knowledge and literature, and discuss implications regarding directions for further research and development, educational or organizational practice, assessment, etc. References to the relevant literature should be provided.

*Conceptual essays*. Such essays can present reflective or theoretical analyses, epistemological studies, and integrative and critical literature reviews. Such papers should be based on or emerge from scholarly research, and be written so as to make explicit their contribution to future research, theory-building, or teaching and learning in an area of educational practice related to statistics and probability learning or usage. (On occasion SERJ invites reflective papers about the implications of a research literature for teaching and learning in statistics and probability, or that aim to inform researchers who plan related studies.)

**Brief reports**. These are papers whose shorter length is usually due to their focus on topics or findings that do not merit or require a lengthier regular paper as described above. Such papers can report, for example, on replication and extension research, instrument development and psychometric studies, program evaluations, or interim results from innovative instructional projects. The possibility of submitting a compact Brief Report offers researchers a useful publication channel while maintaining the same scientific standards as in full-length papers.

#### **2.2. LENGTH GUIDELINES**

SERJ asks authors to consider the following length guidelines when planning papers:

1. *Reports of original empirical research* and *Conceptual essays* should normally not exceed a maximum of 10,000 words in body text (about 18-20 pages). However, authors are encouraged to aim for shorter papers: The 6000-8000 words range (about 12-15 pages) in many cases will prove suitable for a deep yet concise reporting. Further, some studies, especially of a quantitative nature, can be effectively reported in an even shorter form within the 4000-6000 words range. (*Note: Word counts* in these guidelines refer only to body text or main text, not to all other elements, i.e., abstract, keywords,

acknowledgments, references, or appendices. Also, all *page counts* refer to text formatted according to the guidelines in section 4: single-spaced text in 11 point Times New Roman font, using margins of 3.5 cm on all four sides.)

- 2. Brief Reports should be no more than 2500 words of body text.
- 3. *Papers longer than 10,000 words* body text may be appropriate in some cases, but in general should be avoided. Such papers will be considered for review only at the editor's discretion as they might pose a burden on both reviewers and readers. Authors should justify the need for that length in their cover letter.

The above guidelines are not meant to restrict authors in sharing their work in a scholarly and detailed way. However, the essence of scientific writing is in concise and clear reporting. In an era of information explosion, SERJ encourages authors to aim for focused and balanced writing, in order to maximize papers' ability to contribute to SERJ readers and to the accumulation of new knowledge.

#### **2.3. ON DUPLICATE PUBLISHING**

Prospective authors should be attentive to "prior/duplicate publishing" issues. Like many journals, SERJ's policy is that in general, papers that have already been published (i.e., were already made available and intended for wide public consumption via printed or electronic means, including the Internet or a CD) cannot be accepted for consideration by SERJ. Due in part to opportunities afforded by the Internet, there are multiple situations where a duplicate publishing situation might exist to a greater or lesser degree. Authors are asked to read **Appendix 1**, which describes five common situations involving prior publishing: in *a paper in conference proceedings*, in *a technical report, on a personal website, in a paper in a non-English language journal*, and *in a brief report in a refereed journal*. For each, Appendix 1 explains to what extent they involve duplicate publishing (some do not) from SERJ's point of view, and how this can be addressed.

What authors should do regarding duplicate publishing, beyond the points in Appendix 1:

- 1. In the *cover letter to the editor* (see 3.2 below) all authors must indicate whether or not a paper was previously published, in whole or in part, or is being considered elsewhere for publication. Relevant explanations should be provided if a prior publishing situation exists.
- 2. Authors are encouraged to consult the editor in advance if, beyond what is already covered in Appendix 1, doubts still exist as to whether a prior publishing situation is present in their case or if they are unclear how to address it.
- 3. More broadly, authors are advised to consider duplicate publishing issues in advance if they plan several papers based on the same study. Since journals may have different policies regarding duplicate publication, authors should examine editorial policies of target journals and consider implications for their publication strategy; this can help authors to find a suitable outlet for their work. For example, when writing a conference paper, authors should plan what selected materials to submit for publication in conference proceedings, and what additional texts, results, analyses, and discussions to add to a SERJ submission.

# 3. SUBMISSION, REFEREEING, AND PUBLICATION PROCESSES

#### **3.1. WHAT AND HOW TO SUBMIT**

Manuscripts should be submitted to co-editor Robert C. delMas *<delma001@umn.edu>*. Manuscripts should be sent as a file, preferably in Microsoft Word format (.doc file), attached to an e-mail message containing a cover letter to the editor. The attachment filename should use the surname (last name) of the submitting author, e.g., *<*Surname\_date\_SERJ.doc>.

We advise authors to avoid submissions in RTF format, as some formatting elements can be lost during file conversion. Authors who cannot use Microsoft Word should contact the Editor to make sure RTF conversions

will keep their paper intact.

The **filesize** of submitted papers should preferably be well under 1 MB. This is essential to reduce the eventual size of journal issues which readers have to download. Authors should be selective in using figures and tables which cause a large increase in filesize beyond 1MB, as explained in section 4.3 later.

Manuscripts should be in a form ready for blind review and conform to the formatting and other instructions in Section 4. All elements of the paper being submitted (i.e., abstract, body/main text, tables and figures, etc.) must be compiled in one file, and placed where they would normally appear in a published paper, i.e., tables and figures should not be placed at the end of the paper.

# 3.2. DETAILS OF THE COVER LETTER TO THE EDITOR

The e-mail message (cover letter) to the editor will include:

- 1. A statement that the manuscript [title] is submitted for review for publication in SERJ. If there are multiple authors, the submitting author should also state that all authors have agreed to have the manuscript submitted to SERJ for review and possible publication.
- 2. A statement regarding duplicate publishing. Depending on the situation, either that "the author[s] warrant that the paper submitted has not been previously published, in whole or in part, in any printed or electronic means, and is not being considered elsewhere for publication". Or, if a duplicate publication may be an issue, such as if any of the five cases described in Appendix 1 seem relevant, an explanation regarding what parts were published before, where and how, and in what areas the submitted paper is different from the prior publication if required according to Appendix 1. At times the editor may ask for a copy of the prior publication, so it is a good idea to attach it as well. (Note: When a paper was previously published, in part or in whole, a brief descriptive statement should be included in an Acknowledgments section which will appear in the paper.)
- 3. Full contact information for all authors, i.e., names, e-mail, institutional affiliation, complete mailing (postal) address, fax number.
- 4. Optionally, authors may also include other details, such as a request and justification to allow deviation from length guidelines, comments regarding the paper's relevance to SERJ in case the paper appears to address a novel or unusual topic, clarify technical details such as the name of the corresponding author if it is not the person submitting the paper for review, or other issues as the case may require.

#### **3.3. THE REFEREEING PROCESS AND EDITORIAL DECISIONS**

Incoming papers are first screened by the editor, often in consultation with other editorial board members, to examine relevance to SERJ's aims and to submission guidelines, and to check that there are no major flaws that would result in an outright rejection. If problems exist yet appear to be fixable and the paper seems to have potential, the editor will aim to provide brief advice on key problem areas that need to be addressed before the paper can be suitable for a review, and encourage resubmission.

Papers that pass the initial screening are reviewed by an associate editor who acts as an internal referee and at times may coordinate the review process, and by at least two external referees. SERJ uses a double-blind refereeing process, i.e. authors do not know the referees' identity and (external) referees do not know the authors' identity.

Based on the referees' reports, the editor makes one of the following standard decisions: a) to accept the manuscript as submitted; b) to accept the manuscript provisionally, after relatively minor revisions are made; c) to reject the manuscript but encourage the authors to rewrite the paper and resubmit it for another refereeing cycle, although no promise is made that after revision the paper would be accepted; d) to reject the manuscript. *These decisions and the criteria to be used by the referees are described in more detail in Appendix 2 of this document, which authors are advised to read, and in the document "SERJ guide for referees" which can be found on the SERJ website.* 

Upon completion of the refereeing process, authors receive a letter specifying the editor's decision regarding

the acceptability of the paper and a summary of the editor's explanations for this decision. The anonymised reports from the referees are attached to this letter. (Each referee also receives an anonymised copy of the same materials sent to authors.) Papers rewritten and resubmitted normally undergo a further stage of external refereeing, and sometimes more than one revision cycle is needed before rejection or acceptance decisions are reached. Revisions in provisionally accepted papers are supervised by the editors or associate editor, usually without further involvement of external referees.

Papers accepted for publication may be further revised by the editors or assistant editor to improve clarity of presentation and correct technical issues. On acceptance, authors will be asked to sign a copyright transfer form (available on the SERJ website). Papers that are ready for publication will be sent to authors for proofing if time permits, and in such cases authors will be asked to react to the proofs within 2-3 days and indicate small technical changes that may still be needed. Authors will be e-mailed an electronic copy of their paper when it is published on the SERJ website.

# 4. MANUSCRIPT PREPARATION AND FORMATTING

#### 4.1. WRITING STYLE AND PRESENTATION

Papers should be written with the aim of making them interesting and comprehensible to researchers as well as to practitioners and statistics educators in general, not only to specialists in the paper topic. Given the international audience of SERJ, authors should make sure to provide sufficient details regarding terms, acronyms, concepts or issues which are country-specific and whose understanding is essential to readers from other countries.

Papers should be concise and focused, but contain all information necessary to inform both referees and readers. Before finalizing a paper and submitting it to SERJ, authors are advised to review related papers that have already been published in SERJ to become acquainted with the type of discourse and text organization. (That said, note that new length guidelines and formatting specifications involving margins, paragraph spacing, and other elements went into effect starting July 2005. Hence, papers published by SERJ prior to that date have a somewhat different appearance.) In addition, authors should ensure that they follow the APA bibliographic citation style, as explained in Section 4.3 below.

#### 4.2. BLINDING

SERJ uses double-blind refereeing, i.e. authors should not know referees' identity, and (external) referees should not know authors' identity. Submitted manuscripts should be in a form ready for blind review, with the exception of two elements: (a) the names and e-mails of all authors should appear on page 1, under the paper's Title, and (b) the name and full mailing address of the corresponding author should appear after the References (see section 4.3). These two identifying elements should be left in the submitted file simply to ensure it can be properly recorded and linked with the cover letter; they are always removed by the editor before a file is circulated internally or to external referees. Otherwise, the blinding of the paper before submission is the responsibility of the authors, who should make reasonable effort to see that the manuscript does not contain clues to their identities.

Blinding may take various forms. All authors must check the file properties (under the "File" menu) to ensure that no personal details were automatically inserted by their wordprocessing program. In some cases, there are no specific clues in the paper itself so authors have nothing to do. In other cases, authors may have to take out information from the acknowledgments section, delete the name of the institution or town in which data were collected, or omit other obvious clues. It is not desirable, however, to omit information that is pertinent to referees' ability to evaluate the scholarly quality or the scientific background of the paper, such as deleting from the reference list bibliographic items in which the authors' names appear. When authors want to refer to their prior publications or work in anonymity without suggesting it is their work, it is preferable to use the 3rd person voice. For example, instead of "In our prior work (Smith and Jones, 1998) we developed a model...", use: "This study is based on a model developed by Smith and Jones (1998)...".

That said, it is not always possible to hide an author's identity completely. For example, when an established researcher has published several prior papers based on research with unique characteristics, such as in terms of the theoretical model, respondents, or set of instruments, further manuscripts along the same lines will have a unique "signature". As a result, different authors may adopt somewhat different strategies regarding blinding. In fact, some authors are not so concerned about anonymity, as they trust the integrity and professionalism of referees. Nonetheless, if the editors identify during the initial screening of the paper obvious signs for the authors' identity, they have the discretion to remove them on their own, or request additional blinding from the authors before the manuscript can be reviewed.

## 4.3. FORMATTING AND LAYOUT

Authors should consistently follow all specifications below when preparing their manuscripts. Authors are required to use the **Template file** available for download at the SERJ website: <www.stat.auckland.ac.nz/serj> and apply the formatting styles in it. Attention to these details early on reduces the need for extra processing later and helps both the Journal and the authors in preparing accepted files for publication in an efficient manner.

*Title and Author(s)*. The title should appear at the beginning of the paper, followed by each author's name, institutional affiliation and email address. Centre the title in **BOLD CAPITALS**. Centre the authors' names in CAPITALS. Centre the authors' affiliation(s) in *Italics*. Centre the authors' email addresses in *Italics*. Affiliation should be academic institution or employing organization, or town of residence if an author is not associated with an academic institution or organization. Leave one blank line between the title and each author's information. When there is more than one author, give all relevant details for the first author, then for the next author, and so on.

*Abstract.* After the authors' details, leave a blank line and centre the word **ABSTRACT** (in bold capitals), leave a blank line and include an abstract (i.e., a summary of the paper) of no more than 120 words in length, all set in *italics*. Right-indent the whole abstract 0.6 cm (0.24").

It is imperative to plan the abstract carefully - it is the paper's most important link to the outside world, together with the paper's title and keywords. Most researchers come across the abstract as a stand-alone paragraph when they perform a bibliographic search. This text is often their *only* basis for deciding whether to find and read the paper itself. Hence, authors should invest in writing a clear abstract that is structured, informative, accurate, non-evaluative, coherent, and readable. The content of the abstract may depend of course on whether it summarizes an empirical study or a conceptual/review article. Since space is limited, writing should be very concise and selective, focusing on a few key elements. With this in mind, the abstract should provide a sense for the puppose of the paper's contribution is made clear. The abstract should be self-contained, i.e., no bibliographic citations should be used and no assumptions should be made that readers will actually read the paper itself. Usually the abstract should be written only after the paper itself is completed.

*Keywords*. After the abstract, leave a blank line and type *Keywords* (in bold italics) followed by three to six key words or brief phrases, separated by semicolons. These keywords will often be used to index the paper by bibliographic services, and should be selected with care. It is preferred (though not mandatory) that the first keyword is *Statistics education research* and other keywords chosen mainly from among those commonly used in bibliographic databases.

Sectioning. The paper should be divided into sections, and into subsections and smaller divisions as needed. Use capital bold letters for the TITLE, **SECTION** TITLES, **SUBSECTION** TITLES, ACKNOWLEDGEMENTS, REFERENCES, and APPENDICES. Section titles should be centred and numbered with 1., 2., 3., etc. Subsection titles should be left-justified and numbered with 1.1., 1.2., 1.3., etc. (Note: The division into sections and subsections and the use of a numbering system as explained above help readers to understand the paper's structure, and simplify the process of feedback by reviewers and editors as well. Manuscripts without these essential formatting features will be returned to the authors.)

Usually a division into sections and subsections should be sufficient, yet on occasion sub- subsections may be needed, such as when a subsection stretches over multiple pages and needs further internal division. In such a case, create sub-subsections by using an indented in-line header in bold italics. To present a list of smaller elements within a section, subsection, or sub- subsection, either use a numbered list with numbers 1., 2., 3., etc, or a bullet list for short lists of 2-5 brief text elements. Details regarding spacing and indenting of text in sections, subsections, and smaller divisions are given under *Formatting* below, and illustrated in Section 2 above.

*Formatting.* Please implement all the following:

- 1. Page size. Set the page size to A4: 21.0 cm width X 29.7 cm height (8.26" x 11.69").
- 2. Margins. Use margins of 3.5 cm (1.37") at Left, Right, Top and Bottom.
- 3. **Font**. All text should be typed using 11 point Times New Roman font, with two exceptions: (a) The Title should be 14 point, (b) text inside tables should be 10 points, all in the same font.
- 4. **Emphasis**. Text within the body text should only be emphasized by the use of *italics* (not underlining, not bold).
- 5. **Justification**. All body text should be both left and right justified (i.e., full justification), with two exceptions: (a) Centre the Title/Author information and Section titles, (b) Right-justify the name and mailing address of the corresponding author which appear after the list of references.
- 6. **Indenting.** The first line in each paragraph of the body text should be indented by 0.6 cm (0.24"). For numbered or bullet lists, indent the number or bullet by 1.2 cm (0.47") and set the text, in hanging indent format, further to the right by an additional 0.6 cm (0.24"), as illustrated in Section 2.
- 7. **Spacing**. Use 'single spacing' throughout the whole paper, including the title, author information and abstract. Exactly one blank line should be left before authors' names, abstract, acknowledgements, references, and appendices. Exactly one blank line should be left before *and* after section titles, subsection titles, and titles of tables and figures. Body text that follows a table or figure should be separated from the table or figure by exactly one blank line.
- 8. Footnotes and endnotes. Do *not* use any footnotes, footers, or endnotes. All key text should appear within the body text.
- 9. **Page numbers**. Insert a page number in the centre of the top margin (top header), starting on page 2 of the paper. Otherwise, do not write any text in the header.
- 10. **Things to avoid**. Do NOT add an extra 2nd space after a period at the end of a sentence. Do NOT add blank lines between paragraphs or items in a reference list, or before sub-subsections. Do NOT use spaces to indent text always use tabs.

*Figures and tables*. In general, use only tables or figures (charts, graphs) that are essential. Design them for effective communication of key information and of main patterns of findings. Tables and figures should be included within the body of the paper, not at the end, and created according to the style guidelines of the American Psychological Association (see *Publication Manual of the American Psychological Association: Fifth Edition*, 2001.) Among other things, this style dictates that a title for a table is placed above the table, while a title for a figure is placed below the graph or chart. Tables should use only horizontal lines and no emphasis except italics (i.e., no bold or underlining).

If you do use tables, charts or graphs, choose a format that is economical in space. This means that (a) the table or figure should fit within a single published page of the Journal (see *Formatting*), in legible type not below 10 points; (b) the resulting file size should be as small as feasible. Bad table and figure formats can lead to very large files, which in turn can complicate the sending of files to reviewers, and increases overall paper size and download time for readers. If your file exceeds 1 MB in size, you will be asked to reconsider the use of non-essential or very large charts or graphs in order to try to reduce file size. (*Note:* Some graphics are not correctly replicated across platforms, i.e., from Mac to PC or vice versa. Please try to adhere to standard graphic formats. If there is any chance that your graphics may not transfer to another platform, then please also include a

Colour in charts or graphs may be acceptable if it was part of original research materials or enables highlighting of special features of a chart or graph. Yet, authors must be aware that many readers will print or photocopy papers in black and white, not in colour. Hence, when planning and writing, authors should consider the comprehensibility of text that refers to colours, and of charts and graphs that contain colours, from the point of view of readers using texts printed only in black and white. In some cases, explanatory statements may be necessary to help readers understand the structure of colour-based charts or graphs. If needed, modify charts and graphs so that they use colours and patterns that are contrasting or distinct enough to be discernable in shades of grey when printed without colour.

Acknowledgments (optional). Authors may add a brief ACKNOWLEDGMENTS section after the end of body text and before **REFERENCES**, to acknowledge prior publication, support from funding agencies, or help by research assistants or various collaborators. That said, authors may choose to reduce or omit details in this section when submitting a manuscript for review, in order to avoid disclosing their identity during the blind review process. Relevant details will be added back into this section once a paper is accepted, when authors submit a final manuscript for publication.

**Bibliography and citations.** References to the relevant literature should follow the American Psychological Association guidelines described in *Publication Manual of the American Psychological Association: Fifth Edition*, 2001. Selected details also appear on the APA website at: http://www.apastyle.org. Many universities publish abridged descriptions of basic aspects of the APA style on their websites and these can be found through online searches.

Examples for a variety of references are provided in the SERJ Template file. Each listed reference item should be cited in the text, and each text citation should be listed in the References. When creating the list of bibliographic items, list all items in alphabetical order. Use a hanging indent of  $0.6 \text{ cm} (0.24^{\circ})$  for each item (See the Template file). Do not add extra blank lines or spacing between bibliographic items.

**Details of the corresponding author**. At the conclusion of the paper, after the references, insert a blank line and then provide, in a right-justified format, the name (in capitals), followed by the complete postal (mailing) address, of the corresponding author. Usually, but not always, this will be the first author. (As explained earlier, these details are removed by the editor before the paper is sent for a blind review).

*Appendices (optional)*. Authors may add 1-2 appendices if there is a need to present valuable auxiliary information, such as the full text of a new research instrument or a questionnaire used in a study whose details are not already widely available. With few exceptions, no results or tables with additional data should appear in an appendix, but rather be part of the main text. Appendices should be brief and essential to the understanding of the paper and are allowed at the discretion of the editor.

#### 5. FINAL REMINDERS AND ADVICE

Given the nature of reviewing and publishing electronic manuscripts, authors are reminded that they must attend to the length guidelines, number all sections and subsections in a consistent manner, follow the formatting and layout guidelines in Section 4, use the Template file and apply the styles within it, avoid submitting large files (beyond 1 MB) without considering carefully the actual need for all elements, and send a proper cover letter.

Going beyond technical aspects, it is important to state that the review process aims to enable SERJ to accept for publication high-quality manuscripts that are interesting, informative, and make a genuine contribution to scholarly knowledge and practice in statistics education. The review process is designed to provide authors with valuable feedback that can help them to further develop their papers and bring them to adequate quality if possible. Yet, there is interplay between the initial quality of a submission and the depth and breadth of the feedback that authors can hope to receive. It is easier to review and provide constructive feedback on papers that describe well-planned studies, that are well-developed, logically organized, and written in a clear and succinct style. When there are serious problems with the design, conceptualization, interpretation, or conclusions, when writing is poor or texts lack essential details or well-developed discussions, reviewers may not (or cannot) get into details.

It follows that authors should read their manuscripts critically and consider the criteria that the editors or reviewers are likely to apply, as described in Appendix 2. It is also recommended that, before submitting a manuscript for review, authors obtain constructive feedback from knowledgeable colleagues on earlier drafts, and review the writing style in papers of a similar nature such as those already published in SERJ. These steps can increase the likelihood of receiving detailed and helpful feedback, and can contribute to the paper's quality and acceptability for publication.

Please send queries about these guidelines or about papers you are considering, and submit new papers, to co-editor Robert C. delMas *<delma001@umn.edu>*.

### APPENDIX 1: MORE ON DUPLICATE PUBLISHING

There are multiple situations where a duplicate publishing situation could emerge. To aid authors, below we describe five common situations that authors should consider.

*Conference proceedings*. Some authors submit manuscripts to SERJ based on a paper previously published in conference proceedings, whether in print or on a CD and/or via the Internet. Presentations in conferences are often a springboard for writing a broader paper for publication, hence SERJ encourages papers based on such presentations and will consider them, *if* what is being submitted to SERJ is *substantially expanded* compared to the proceedings paper, *adapted* to the goals and format of the Journal, and made suitable for the Journal's audiences. This usually does not present a problem as many conferences pose a limit on word/page count (e.g., 2-4 pages), so what is published in the proceedings is limited in scope from the outset. However, if an author submits to a conference proceedings or publishes in the conference Website a full-length paper, a duplicate publication situation may arise.

**Technical reports**. Many funded projects require that researchers prepare technical or progress reports and publish them in print or on the Internet, as part of project dissemination process or as a 'deliverable' product of the project. If such a report is submitted to a journal after it was already published through other means, an apparent duplicate publication situation is created. In general we do not consider it as a prior publication, as this situation is as a part of the scientific communication process, and because in many cases the circulation of such technical reports is limited. However, the manuscript submitted to SERJ must *not be identical* to the project report, and needs to be *adapted* to the goals and format of the Journal and made suitable for its audiences.

**Publication on a personal Website**. Some authors post drafts of research manuscripts on a personal/departmental Website, to solicit commentary from colleagues or share their work with a local community. This is a natural part of the scientific communication process, and scholarly discourse is aided by the accessibility of the Internet. Hence, from SERJ's point of view, this is not considered as prior publication. Yet, the manuscript eventually submitted to SERJ *should not be identical* to the draft, should be *adapted* to SERJ's goals and format, and made suitable for its audiences.

**Prior publication in a non-English language journal**. Some authors publish a paper in a non-English journal, such as a local (refereed or non-refereed) publication, and later translate the paper in order to publish it in English in SERJ. This is not considered a prior publication because many SERJ readers may not have any access to the non-English publication. Nonetheless, this situation should be acknowledged in the letter to the editor and in the acknowledgments section, and the manuscript submitted to SERJ in English should be *adapted* to the goals and format of the Journal and made suitable for its audiences. (*Note*: while SERJ does accept papers for review in French or Spanish, English is preferred as it maximizes the accessibility of the paper to an international readership.)

*Prior Brief report*. Authors who publish (either in SERJ or in another peer-reviewed journal in the English language) a brief report (e.g., with preliminary results) must *not* later submit a full-length paper on the same study to SERJ, *if* the full-length paper includes most of the materials already published in the brief report.

Authors should examine their own situation, and decide how to address it, based on the information in this appendix, as well as the suggestions in Section 2.3 above. Authors should present relevant information in their letter to the editor.

## APPENDIX 2: MORE ON EDITORIAL DECISIONS AND REFEREES' CRITERIA

This appendix first describes the four basic decisions that the editor makes regarding an overall judgment of the acceptability of the paper, taking into consideration the referees' recommendations and detailed reports, as well as the editor's own perspectives. Later, the appendix describes the key criteria that the referees and editor are expected to follow.

# **2.1 EDITORIAL DECISIONS**

Overall, the editors can make one of four basic decisions:

- 1. *Accept*. The paper fits well the Journal policy, has a good quality and should be published. Very small corrections or fixes of a technical nature may be needed.
- 2. *Provisionally accept after relatively minor revisions.* The manuscript is strong and interesting. However, modest yet important changes in content are needed before the paper can be fully accepted for publication. For example, authors may need to clarify some points, add missing information, perform an extra analysis, expand the discussion of results of an analysis, strengthen a specific subsection, or complement the references. Further external refereeing is usually not needed after revision the revised paper will be assessed only by the editor and associate editor.
- 3. *Reject but encourage a rewrite and resubmission.* The paper has some significant flaws in its current content, methodology, analysis, presentation of results, or scholarly writing, as detailed in the referees' reports and summarized in the editorial letter. Yet, the theme and information provided are of potential interest to SERJ readers, and the problems detected may be fixable. Hence, authors are encouraged to rewrite and resubmit. After resubmitting, a rewritten paper will be reviewed again by external referees, possibly those who reviewed it before, to assess the extent to which the suggested changes were implemented and whether the new draft is of acceptable quality. It should be emphasized that no promises are made that after a rewrite, the resubmitted paper will be found suitable for publication. Some such papers are eventually rejected.
- 4. *Reject.* The paper is not adequate for SERJ. Reasons for rejection may include, for example: the author is not acquainted with previous relevant research on the same topic in ways that deeply affected the design or interpretation of the findings or the contribution of the paper, the data used are of poor quality or there is an inadequate research design, data analysis is inappropriate, there are unwarranted conclusions that go well beyond the information available to the authors, and so forth. The paper is rejected because even with a rewrite, it is unlikely that the problems detected can be fixed so as to make the paper of sufficient quality for publication.

#### 2.2. THE REFEREEING CRITERIA AND REFEREE REPORT

In addition to the recommendation about acceptance (referring to the four basic decisions which the editor makes), the referee is asked to provide a detailed report that will be sent to the authors. The referee report should include a detailed analysis of the paper that (a) enables authors to understand the basis for the referee's recommendations, and (b) provides constructive suggestions that can help the authors to improve the paper. The report may contain four parts: recommendation, overall evaluation of the paper, detailed analysis, and (optionally) comments on smaller issues/details. The length and content of each part of the report will vary, depending on the specific nature of the paper being refereed, and the type of commentary the referee wishes to include.

*Recommendation*. As explained above, one of four decisions: accept, provisionally accept after minor revisions, reject but encourage rewrite and resubmit, or reject.

**Overall evaluation**. A brief overview of the reasons for the recommendation given, i.e., key positive and negative points regarding, e.g., the overall importance of the topic, quality of research, quality of scholarly writing and analysis, main strong and weak points, and the overall (potential) contribution of the paper to current conceptual and theoretical knowledge and to educational practice.

**Detailed analysis.** This part addresses in detail areas or aspects that seem to the referee to be problematic or require further attention. The referee can also provide here specific constructive suggestions for how to facilitate improvements.

The following list describes a possible structure and content relevant to a report about empirical research, whether quantitative or qualitative. Most points will also be relevant when evaluating conceptually-oriented papers and critical literature reviews.

- 1. The appropriateness and importance of the *purpose/goal* of the study, judged against the aims of SERJ.
- 2. Soundness of the *theoretical framework or the scholarly rationale* for the work, and the quality of the review and of the critical synthesis of previous research or bibliography.
- 3. Relevance and soundness of *research design/approach/methods*, and the data collection process, given the research goals or hypotheses.
- 4. Relevance and soundness of *data analysis*, including choice of analytic tools and procedures, and/or interpretative scheme; effectiveness of data presentation in tables and graphical displays or in the main text.
- 5. Depth, breadth, and quality of the discussion and conclusions. In particular: the explanation of the meaning of the key results, the analysis of how the paper's findings relate to the existing literature or add to the current knowledge base, and the adequacy of the discussion of the limitations of the work. In addition, given the aims of SERJ, the referee will evaluate whether there is sufficient and explicit discussion of the contribution and implications both to research/scientific knowledge and to applied educational aspects, such as to teaching practices, curriculum planning, assessment, teacher preparation, and so forth.

*Smaller issues*. The report could close with a numbered list of comments about minor issues which should be corrected, such as typographical errors, syntactical and formatting problems in specific paragraphs, confusing tables or graphical displays, inaccuracies in references, lack of consistency in APA bibliographic style, etc. Here the referee could also make other suggestions for tightening the text, or for omitting tables or displays if it can help focus the paper's message and reduce its length without loss of key content.

# 2.3 CONFIDENTIALITY

It is SERJ policy that papers sent to referees should NOT be shared or circulated (via printed or electronic means) with any other people or organizations. Referees are expected to maintain the confidentiality of papers they review and of the refereeing process. They are not permitted to make any use of papers they receive for refereeing, and are not allowed to cite such papers before they are published by SERJ.

Version: January 2009