

Reviewing and Writing for the Journal of Statistics Education (JSE)

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A (Very) Brief History of JSE

- Founding Editor - Jackie Dietz, 1992, North Carolina State University
- First Issue - July 1993
- Original Managing Editor - Tim Arnold, North Carolina State University wrote an article describing the structure and philosophy of the journal in the first issue (<http://www.amstat.org/publications/jse/v1n1/arnold.html>)
- 1993 – 1 issue; 1994 – 2 issues; 1995 onward 3 issues in March, July, November
- Past Editors: Jackie Dietz 1992-1999; Tom Short 2000-2003; Bob Stephenson 2004-2006; Bill Notz 2007-2009



Part 1: Writing for JSE

Writing for JSE - Types of Papers

- Curricular reform in statistics

Tintle et al. (2011), “Development and assessment of a preliminary randomization-based introductory statistics curriculum“

<http://www.amstat.org/publications/jse/v19n1/tintle.pdf>

- The use of cooperative learning and projects

Wilson et al. (2011), “A Comprehensive Probability Project for the Upper Division One-Semester Probability Course Using Yahtzee“

<http://www.amstat.org/publications/jse/v19n1/wilson.pdf>

- Innovative methods of instruction and/or assessment

Bates Prins (2009). “Student-Centered Instruction In A Theoretical Statistics Course“

<http://www.amstat.org/publications/jse/v17n3/batesprins.pdf>

http://www.amstat.org/publications/jse/jse_mission.htm



Writing for JSE - Types of Papers

- Research on students' understanding of probability and statistics
Cooper and Shore (2010). "The Effects of Data and Graph Type on Concepts and Visualizations of Variability"

<http://www.amstat.org/publications/jse/v18n2/cooper.pdf>

- Research on the teaching of statistics, attitudes and beliefs
Williams (2010). "Statistics Anxiety and Instructor Immediacy"

<http://www.amstat.org/publications/jse/v18n2/williams.pdf>

- Creative and tested ideas for teaching probability and statistics topics
Pfaff and Weinberg (2009). "Do Hands-On Activities Increase Student Understanding?: A Case Study"

<http://www.amstat.org/publications/jse/v17n3/pfaff.pdf>

http://www.amstat.org/publications/jse/jse_mission.htm

Writing for JSE - Types of Papers

- The use of computers and other media in teaching

Al-Aziz et al. (2010). “SOCR *Motion Charts*: An Efficient, Open-Source, Interactive and Dynamic Applet for Visualizing Longitudinal Multivariate Data “

<http://www.amstat.org/publications/jse/v18n3/dinov.pdf>

- Distance education

Tudor (2006). “Teaching Introductory Statistics Online - Satisfying the Students”

<http://www.amstat.org/publications/jse/v14n3/tudor.html>

http://www.amstat.org/publications/jse/jse_mission.htm

Writing for JSE - Departments

- Research to Practice

Lunsford and Poplin (2011) “From Research to Practice: Basic Mathematics Skills and Success in Introductory Statistics”

<http://www.amstat.org/publications/jse/v19n1/lunsford.pdf>

- Teaching Bits – Regular features by Bjornsdottir and Garfield and by Everson and Gundlach

- Data Sets and Stories – edited by Dex Whittinghill

Barat et al. (2011) “Examining Potential Predictors for Completion of the Gardasil Vaccine Sequence Based on Data Gathered at Clinics of Johns Hopkins Medical Institutions”

<http://www.amstat.org/publications/jse/v19n1/barat.pdf>

Writing for JSE - Tips

- Follow the author guidelines!

http://www.amstat.org/publications/jse/jse_author_info.htm

http://www.amstat.org/publications/jse/jse_data_contributor_info.htm

- Tell Editor if you are writing a regular paper or for a particular department
- Look at recent published papers for formatting and type of papers published
- Situate your research within extant literature
- Use CIS, JSTOR, JSE search, etc. to complete your literature review

Writing for JSE - Tips

- Assess the effectiveness of teaching/curricular innovations
- Be concise – Give your paper a careful proofread (or have someone else proofread) to be sure ideas are expressed clearly and concisely
- Don't assume that the audience of JSE is only PhD statisticians
- If your paper is rejected but a revision is requested, then write a point-by-point response to the comments in the reviews

Writing for JSE - Submitting

- New manuscript submissions should be sent via electronic mail to the Editor, John Gabrosek, at jse@gvsu.edu.
- Include both non-blinded and blinded versions
- Complete the ASA Author Submission Form
<http://www.amstat.org/publications/jse/SubmissionForm.doc>
- We prefer Word documents but can accept PDF as well
- Include all supplemental materials (data sets, Excel sheets, R Code)

Part 2: Reviewing for JSE

Reviewing for JSE - Process

- JSE Editorial Coordinator Jean Scott processes new submissions. She gives each a number (e.g. JSE 11-040) and notifies Editor and the author
- Editor reads all new submissions and makes a decision to either reject without further review or to send for further review
- About once a month Editor sends an email to AEs informing them of new papers that need reviewing
- Papers are assigned to AEs on a volunteer basis

Reviewing for JSE – AE duties

- AE reads paper within a week (hopefully) and makes initial decision to reject or send out for full reviews
- AE finds two or three referees to review the paper. (Past writers of JSE papers, institutional colleagues, and USCOTS/ICOTS participants are sources of referees as is the JSE editor.)
- AE sends blinded version of the paper and any supplements and a review template to each referee in separate emails
- About six weeks after receiving the paper the AE will be sent a reminder email from the Editor to encourage referees to provide a timely review

Reviewing for JSE – AE duties

- About 12 weeks after receiving the paper the AE will be sent a reminder email from the Editor that a report is needed as soon as possible
- After receiving referee reviews AE writes a report summarizing those reviews and adding any additional comments AE feels are necessary
- AE makes a recommendation to either reject paper without requesting revision, reject and revise, accept conditional on revision, or accept as is (except for minor changes)
- AE sends final report and all referee reports to Editor who then writes a decision letter sent to author along with blinded versions of AE report and referee reports

Reviewing for JSE – AE duties

- Editor informs AE of decision letter sent to author
- AE is expected to handle any revisions to the original paper
- Typical AE handles 3-6 new submissions a year and perhaps 2-3 revisions
- New AEs are provided with an exemplar of an AE report for a paper that went through a revision and then was eventually published

Reviewing for JSE – Referee Expectations

- The goal for any paper submitted to JSE that receives a full review is that referees will provide a complete review within 4-6 weeks of receipt of the paper from the AE.
- Referees should not agree to review a paper in an area where they are not well-versed, especially if there is a technical component to the paper (e.g. the teaching of Bayesian statistics in intro stats)
- DO NOT agree to referee a paper if you do not have time to devote to a careful review within a month of receipt.

Reviewing for JSE – Referee Expectations

- The best reviews are both evaluative (they help the AE and Editor make an informed decision about publication) and educative (they inform authors about possible changes to study design, relevant literature) (Silver 2003)
- Heid and Zbiek (2009) identify the following characteristics of a strong review:
 - Text consistent with recommendation
 - Any summary of the paper is brief
 - Explanation of paper strengths and flaws consistent with goals
 - The seriousness of flaws should be spelled out (is flaw fixable?)
 - Suggestions for revisions (big picture)
- Reviews are not treated as “votes” but rather information for the AE and Editor to use in decision making

Reviewing for JSE – Referee Expectations

“Reviews help authors and others not only to understand the decision on a particular manuscript but also to think more deeply about their work and its contribution to the field. A good review helps an author to refine the presentation of a study, to better situate the work in extant literature, and to focus a research program. It provides others who read it with a depth of perspective that is concurrently focused and broad. In a perhaps underacknowledged way, a strong review has the potential to move the field forward.”

(Heid and Zbiek 2009)

Reviewing for JSE – Referee Template

Name of Referee:

Affiliation of Referee:

Email of Referee:

JSE Number of Paper:

Title of Paper:

Date Manuscript Received:

Date Review Completed (sent to AE):

Recommendation (Please choose from among: Accept as is, Accept conditional on relatively minor revisions, Reject but encourage revision and resubmission, and Reject without encouraging resubmission):

Comments for the Associate Editor and Editor Only (not Seen by Authors):

Comments for the Associate Editor, Editor, and Authors:



Reviewing for JSE – Why Referee?

- Get a sense of what is being done on the cutting edge of statistics education research
- Carefully reviewing papers helps you to communicate your own ideas coherently and concisely
- You may get some excellent ideas to incorporate in your own teaching, research, curricular reform

A few final thoughts

- You can be notified of new issues of JSE by signing up for the JSE listserv. Just send an email to: JSE Editorial Coordinator, Jean Scott at jse@gvsu.edu
- As an author don't hesitate to email me John Gabrosek at jse@gvsu.edu for an update on your paper's status
- Email me if you'd like to referee for JSE
- We welcome your comments, suggestions, and criticisms (well maybe not so much the criticisms)

References

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- Miller, J. (2007). "From Research to Practice", *Journal of Statistics Education*. <http://www.amstat.org/publications/jse/v15n1/miller.html>
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<http://www.causeweb.org/webinar/teaching/2007-05>
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http://www.nctm.org/eresources/article_summary.asp?URI=JRME2003-11-370a&from=B