Special Feature:
Advice for Novice Researchers Who Wish to Publish Their Results

By Nancy Carriuolo, Hunter Boylan, Michele Simpson, Carol Bader, and Barbara Calderwood

The editorial board of the Journal of Developmental Education (JDE) meets annually at the NADE conference to discuss the readership's needs, timely educational themes, and editorial concerns. One of the concerns that surfaced at the 2007 meeting is related to the research manuscripts received by JDE. Research is important to the field of developmental education; research creates new knowledge and lends credibility to our work as developmental educators. JDE's staff and the editorial board, who serve as the journal's honorary peer reviewers, greet the arrival of a new manuscript, particularly a research manuscript, with great interest. Everyone hopes that the manuscript will be publishable, but some, regrettably, are not.

This brief feature article will demystify the process a manuscript undergoes once it leaves the author's hands. Even more importantly, several members of the JDE editorial board will share advice meant to ensure that more research is well designed and conducted. Tips regarding drafting manuscripts that are appropriately presented and are thereby good candidates for timely publication are also included.

Manuscript Review

The following is a snapshot of the route a manuscript follows when it arrives in an editorial office. JDE's specific process will be described, but the basic steps generalize to most peer-reviewed journals. First, the author is notified by e-mail that the manuscript has successfully arrived at JDE. Each JDE manuscript is then assigned a number and sent to at least three board members/peer reviewers (who are also assigned an ID number and given a deadline for completion of the review). The double-blind review process, author identity is masked from all reviewers, and the identity of reviewers is withheld from authors). Sometimes a quantitative or qualitative research editor is needed in addition to the content editors. Each reviewer reads, rates, comments, and recommends an action. (See Figure 1 for the content manuscript evaluation forms that JDE's reviewers use.)

Most reviewers complete the review and send it back to JDE within a month. However, JDE's reviewers also have significant responsibilities at their places of employment, so occasionally reviews take longer, especially if the reviewer is engaging in national or international travel. (See bios on page 45 of authors who are among JDE's editorial board/peer reviewers.)

Reviewers are asked to return the manuscript if they cannot complete the review within the schedule assigned by JDE. The JDE staff waits until all reviews are received; JDE's editor then considers the manuscript and the reviewers' recommendations (publish with high priority, publish if space is available, hold pending revision to be reviewed by either the in-house editors or by the original reviewers, or reject). Authors are informed of the recommendations of the reviewers and editor through correspondence from the editor or editorial staff.

Reviewers often differ greatly in their opinions; this necessitates careful in-house review of the manuscript or perhaps sending the paper out for another opinion. Each manuscript is given a great deal of thoughtful consideration. Peer-reviewed journals commonly take a year or more to make a decision and then need to schedule the manuscript in an appropriate issue, which can take another year. JDE works relatively swiftly; manuscripts move through a review process that takes 3 to 5 months and then on to a revision and/or editing process that lasts until publication (see http://www.nclide.appstate.edu/jdedguide.htm). The speed with which this second phase of the process occurs depends in large part on the ability of the author to make timely revisions, as requested. Even a relatively short waiting period can seem very long to a hopeful author, but the seasoned professional waits patiently.

Much of the time spent processing manuscripts is focused on working with authors to prepare a manuscript for publication. If a manuscript is basically publishable, which means judged to be an important topic for the readership that is presented clearly with sound research or theoretical basis, the manuscript is probably recommended as either publish with high priority or as space allows. These rare manuscripts are nearly ready for publication; often only surface editing is needed. This type of editing requires quick and simple editorial tidying up of the manuscript such as reformatting a bit, adding a comma where needed or correcting grammar, and reworking a sentence or two for clarity. The journal's in-house staff engage in surface editing as part of the publication process. The staff usually just checks with the author to be sure none of the changes has altered the author's intended meaning.

How do editors differentiate between a manuscript that deserves high priority and one that should be published if space allows? Usually the articles that receive high priority are ones that the reviewers and editors feel are especially innovative, challenging, or timely. Other manuscripts, which have been recommended in the as space allows category are on topics that

Figure 1. Sample manuscript evaluation form.
are of use to the field and well presented, but, perhaps, not new or exciting. Authors whose articles are recommended under one of these categories probably do not need too much advice. Therefore, the remainder of this article will focus on advice derived from many years of reviewing manuscripts that have been either rejected or "held for significant revision."

Manuscripts that are held for significant revision may or may not ever be published. Authors need to be willing to work with the editorial staff and to make significant revisions. Perhaps the supporting research or relevant research section needs to be enhanced. Maybe the in-house editorial staff needs to engage in deep editing, which may require significant rewriting of sections for clarity. The author's assistance with this process is essential. The most talented staff editor cannot reorganize and rewrite a manuscript without asking many questions of the author. Often even a flawed manuscript can be revised with the advice of the board and the active support of a dedicated, enthusiastic journal staff. However, authors must remember that manuscripts needing so much work may not ultimately be published. Authors should enlist multiple readers and engage in their own best editing before sending a manuscript to a journal for peer review.

In some submissions, basics such as methodology are so flawed that a manuscript cannot be published even with heavy revision by the author and deep editing (rewriting of sections) by JDR. These manuscripts are consigned to the rejection category, which ends the review process with a rejection letter to the author. No one likes either sending or receiving such letters. To prevent disappointment on the part of the researcher and the editorial board, some of the board members offer the following quick tips.

**Developing a Research Project and Manuscript**

Consider the following suggestions when a research project is no more than an exciting thought in the mind of the would-be researcher. So that you know the member of the editorial board who is giving advice, each board member's initials appear in parentheses following each tidbit of advice.

1. **How to Select the Appropriate Research Paradigm and Design**
   - Consult with faculty in psychology or education departments. They understand research design. (NC, CB)
   - Additional resource: http://www.socialresearchmethods.net/tutorial/tutorial.htm (NC)
   - Allow the research questions to determine the research paradigm and design. For example, if the research questions concern trends or characteristics (e.g., what distinguishes successful students from their less successful counterparts), qualitative designs are more appropriate. (MS)

2. **How to Conduct a Qualitative Study**
   - Don't believe anyone who tells you that qualitative research is easier than quantitative research. (HB)
   - Consider reviewing the basics of qualitative research by reading authorities in the area. One particularly excellent author who demystifies qualitative research is Sharan B. Merriam. (e.g., *Qualitative Research and Case Study Applications in Education*, 1997). (MS)
   - Read examples of how other authors organized their research studies. For example, the following qualitative study was conducted in a college classroom: Simpson, M. L., and Nist, S. L. (1997), Perspectives on learning history: A case study. (MS)
   - Just as quantitative research studies require explicit descriptions of how data are analyzed, so do qualitative studies. It is never sufficient to say that the "constant comparative method was employed" without further elaboration. For example, it is important to explain the patterns that emerged from the data (e.g., successful students attended more discussion groups, successful students took more detailed lecture notes). (MS)
   - Remember that qualitative studies, like quantitative studies, have requirements for validity, reliability, and ethics. (MS)

3. **How to Write Effective Literature Reviews**
   - When doing a literature review, keep separate notes for each possible citation and make sure that all the information you may need later is there initially. (HB)
   - Always keep a search history when using electronic databases to do your literature review. (HB)
   - Begin your research review with the most current articles from the best journals. Those articles will most likely also reference earlier and classic literature. (HB)
   - Beware of the assertion that is unsupported either by a citation or a sound argument. (HB)
   - Although peer-reviewed journals are excellent sources, do not overlook the usefulness of edited books. For example, books on learning strategies edited by individuals such as Winnie or Zimmerman contain articles by respected authorities that provide insights not in journals and citations not found elsewhere. (MS)
   - Another excellent way to identify current and relevant research is to read handbooks published by professional organizations (e.g., International Reading Association, American Psychological Association). These books review the current research literature and offer suggestions for future research. For example, the *Handbook of Educational Psychology*, by Alexander and Winnie (2006) contains excellent chapters on learning theories, problem solving, motivation, reading, writing, mathematics, second language learning, and assessment. (MS)
   - Never overlook the power of doing "hand searches through the stacks." Many excellent articles can be found in this manner, articles never identified with traditional search methods or search engines. (MS)

4. **How to Enhance Validity and Reliability**
   - Do not generalize to other populations or make recommendations beyond what your data tell you. Over generalization is the most common mistake made by researchers. (HB)
   - Consider replicating the important work of other researchers. Confidence in a hypothesis is increased when multiple studies reach the same conclusion. (NC)
   - Make sure the dependent variables selected (e.g., a test that measures students' growth) are sensitive to the research questions. For example, standardized reading tests may not be the best indicator of whether students' growth is in their appreciation of reading or in their study strategies. (MS)
   - Reliability and internal validity can be increased when multiple data collection and data analysis measures are employed. Qualitative researchers refer to this as the triangulation of data. (MS)
   - If researcher-made instruments are used in a study, it is important to embed them in some pedagogical theory and to have other researchers/practitioners critique them before they are used in a study. These steps will enhance the content validity of the instruments. (MS) Such instruments should also be field tested to assure validity. (BC)
   - If students' written productions (e.g., essay answers, projects) are one source of data, it is important that there is a rubric, trained scorers,
and some method of ensuring the inter-rater reliability across the scorers. (MS)

5. How to Employ and Interpret Statistics

- Consult or partner with a local statistician regarding your research design and analyses. Flawed design or data collection often render a study invalid. (BC)
- Some universities have technical people to help with using statistical programs (often IT for the university); check this out. (CB)
- Avoid topics that require you to rely on someone else to provide information, data, or support. You need to control all these variables. If you are in the uncomfortable position of relying on someone else, consider making chocolate chip cookies for the institutional research officer. (HB)
- IPEDs (Integrated Postsecondary Education System; http://nces.ed.gov/ipeds/) is a database of post-secondary education data. (Institute of Education Sciences, 2007) These data can provide a good profile of the general population of students in higher education and the students at peer institutions. (NC)
- For qualitative studies, random assignment of participants is important and parallel characteristics of the control group to the experimental group are key. (BC)
- Remember that just because two events happen at the same time, one has not necessarily caused the other (correlation does not imply causality). In other words, just because you are increasing the amount of writing in your class and the students' grades rise, you cannot assume that journal writing accounts for the improvement. Other important factors or measured variables may be affecting the grades. Check out regression analysis if you want to claim a statistically significant gain with real confidence. (NC)

6. How to Organize and Write an Effective Draft

- Keep it simple. Elegance is overrated in research. (HB)
- Either buy an APA manual or view it online. Become proficient in APA style. (HB)
- Read the JDE articles that have received the annual Outstanding Article award. Five of the most recent articles are on line at www.ncde.appstate.edu; use them as models. (NC)
- Let someone (maybe two someone’s) read your work for sense and format. (CB)
- If your grammar, spelling, and punctuation skills are not excellent, have a member of the writing lab staff read and comment. Readability of the manuscript does affect the reviewer’s first impression. (NC)
- Most research articles published in journals follow a predictable writing format. For example, with a quantitative study it would be important to have these parts in the article: abstract, statement of the problem and its importance; review of literature demonstrating how the problem has not been adequately addressed; statement on how this study would address the problem and why the study would contribute to the literature; a methods section that contains a detailed description of the subjects, the context, the instruments, the procedures, the data analyses methods; the results; the discussion of the results; the implications. (MS)
- Because readers appreciate knowing the research topic or problem as soon as possible, do not leave them a mystery until the fourth or fifth page. Strive to reveal the topic or problem statement by the middle of the second page of the manuscript. (MS)
- Keep the audience in mind. For example, outlining practical implications of the research is very important for the JDE’s largely practitio-

ner readers. (BC)

7. How to Prepare a Manuscript for Submission to a Journal

- Get the author's guides from the journals for which you are interested and FOLLOW THEM. (CB)
- Use the manuscript evaluation form (see Figure 1) as a checklist. “Have you addressed all the categories in which manuscripts are scored?” (BC)
- Remember that tenure and promotion committees value peer-reviewed journals, so in selecting a journal, check to see if the articles are reviewed by an editorial board. Also, remember that journals are unconcerned about multiple authors, but T&P committee are likely to give an article by multiple authors less credit. “Who did what?” is their question. (NC)
- Look at recent issues to see the topics already covered. You probably don't want to submit to a journal that has just explored the topic you are writing about. (CB)
- Talk up front with the editor of the journal to which you hope to submit your manuscript in order to determine interest or get ideas for the manuscript. (HB) If the publication is blind peer reviewed, you may be able to arrange an anonymous conversation. (BC)
- Make sure to match the topic of the manuscript to the journal because some journals prefer qualitative studies; some journals do not publish anything but studies on emerging literacy, and some journals do not publish classroom research studies because they consider them not "rigorous" enough. These preferences can be determined by skimming the table of contents of a journal, making sure to examine a year's worth of publication. (MS)
- Do not make multiple submissions of a manuscript; editors expect that if they are spending time and money reviewing your manuscript, it will be available to them to publish if selected. Editors have long memories; you do not want to be remembered unfavorably as an author who courted multiple journals simultaneously. You can, of course, write different articles using the same research (a good master's thesis or dissertation often yields several different articles published by different journals). (NC)

Learning by Doing

Remember that everyone has manuscripts rejected periodically. In the popular press, Theodore Seuss Geisel (Dr. Seuss) was turned down by 27 publishers. A dozen publishers even rejected J.K. Rowling's Harry Potter manuscript. Authors of this article have published scores of articles, but they also have also opened polite rejection letters, especially as novice authors/researchers. Consider each rejection a learning experience. Pay close attention to the feedback that usually accompanies a rejection and use that feedback to improve your future manuscripts.

The preceding tips are based on decades of publication experience. Researchers who review the tips before starting a research project and once more before making a submission are more likely to be successfully published. JDE and the entire field of developmental education are strengthened by the quantity and quality of research produced by developmental educators. We look forward to your submission.

References


Institute of Education Sciences. (2007). The integrated postsecondary edu-

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Carriuolo is the author of over 30 works that have appeared in publications such as The Chronicle of Higher Education and Education Week. While a U.S. Senator, Paul Simon read one such essay into the Congressional Record. At the invitation of John Gardner, Carriuolo wrote a monograph on PK-16 partnership for the Freshman-Year Experience series. Carriuolo has worked with a number of regional, national, and international higher education and business organizations as a consultant, is affiliated with several professional associations, and is a past president of the National Association for Developmental Education.

Michele Simpson, an Emeritus Professor from UGA, has researched college reading and studying for over 25 years. During those years she published three different books (one of its 5th edition) and over 75 peer-reviewed articles and book chapters. She is particularly proud of being inducted as a Fellow in ACDEA, of authoring a chapter on studying in the Handbook of Reading Research, and of receiving the Elva Knight Research Award from the International Reading Association (IRA).

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