Abstract

Academics publish for a number of reasons including personal satisfaction and the opportunity to share research or successful pedagogical techniques. One of the more significant reasons, however, is to meet requirements for promotion and tenure. Although higher education institutions may vary in expectations, all require a certain degree of professional development for faculty to attain tenure and advance through the professorial ranks. This paper offers advice for publishing, based on the author’s considerable experience serving in various editorial positions at a number of technical publications. Specifically, the paper examines appropriate content, writing quality, ethical considerations, and interactions with editors.

Introduction

Why write? Professional educators have a long history of pragmatic writing: in college, as evidence of knowledge and a demonstration of research skills; in graduate school, as proof of original thought and advanced skills; and professionally, as a pathway to tenure and promotion.

While writing does involve a certain level of creativity, it does not require innate talent. Interestingly, noted fiction writers, who do have an innate talent, view writing as a type of problem solving. Novelist F. Scott Fitzgerald once suggested, “You don’t write because you want to say something; you write because you’ve got something to say.” Likewise, journalist and novelist Joan Didion explained, “I write entirely to find out what I’m thinking, what I’m looking at, what I see and what it means” [1]. In this sense, professional writers are engaged in the same activity as professional engineers: using creativity to develop an elegant and robust solution to a problem.

In an industrial setting, engineers write to convey technical information to a wide constituency: peers, management, shareholders, and the general public. In academia, however, engineers primarily write for professional advancement, especially at the onset of their careers, since professional development is a criterion for promotion and tenure. As they advance through the academic ranks, however, the quality of writing may change, with a focus on identifying and developing the knowledge of the field itself. Dubbed the “body of knowledge” (BOK) by the ASCE [2], many other professional organizations, such as the ACM’s Special Interest Group on Computer-Human Interaction [3] and the ASQ [4] have been striving to define and classify the knowledge peculiar to their fields. The NSPE offers a broader definition: “A profession’s BOK is its common intellectual ground—it is shared by
everyone in the profession regardless of employment or engineering discipline” (p. 4) [5]. To that end, academic publications can provide invaluable contributions by serving outlets as to a wide professional audience.

**Appropriate Content**

All journals tailor their content to examining specific areas within particular disciplines. ASEE’s *Journal of Engineering Education*, for example, is the society’s archival publication and publishes original work that contributes to the BOK of engineering education. IEEE publishes a wide array of journals on various topics related to electrical engineering as well as journals that focus on other areas of interest to that primary audience: for example, *Transactions on Professional Communication* or *Technology and Society*.

Authors should be realistic about considering content as well as a publication outlet. Submitting the results of a not-so-original research project to a journal with a 20% acceptance rate is self-defeating. Instead, think smaller, as Jeff Slagell suggests: “Your first publication doesn’t have to be an earth-shattering research study” [6]. It does, however, need to be harmonious with the journal’s general direction and editorial policy; to ensure this, examining a few issues of the journal is important. Even a cursory perusal will reveal the typical content, length, and style of articles appropriate for publication in that journal.

In addition to reviewing potential publication outlets, conducting a thorough literature review is essential for content originality. Journals will probably not publish an article that repeats information available elsewhere, and research studies need to fit an unoccupied niche. According to Sage Publications’ guidelines, publishable articles typically exhibit the following characteristics:

- They present new knowledge, either in the form of substantive research findings, theoretical developments, new insights into existing debates, new analyses of existing knowledge or a synthesis of the literature.

- They are grounded in the relevant literature, demonstrating familiarity and engagement in an on-going academic conversation.

- They address new or familiar issues pertinent to the discipline or field.

- They ask or attempt to answer provocative questions in a persuasive manner.

- They are well written, with carefully crafted and sustained arguments (p. 57) [7].

**Writing Quality**

In addition to original content, the writing needs to engage an audience. Resources available to authors are numerous. In fact, many publishing houses and journals offer very helpful, free materials for potential authors. The ASME website, for example, includes an article that
details manuscript specifications as well as a number of helpful hints, such as explaining the various sections required, examples of reference format with a table indicating journal abbreviations to use in citations, and other items of interest regarding writing for ASME publications [8]. Similarly, Wiley devotes a section of its website to advice for authors: finding a journal, preparing the manuscript, submitting the paper, and publication [9]. And sometimes editors will use their columns to dispense advice. For example, Steve McConnell, editor of IEEE Software, once spent three pages detailing what makes an article publishable—statistically significant research findings, a focus on one topic, a clear writing style—and what does not—fuzzy focus, overgeneralizing, too much background, padding for length, and inappropriate content [10]. New authors, in particular, are encouraged to consult these types of resources as well as traditional articles offering advice.

Publication in a professional journal requires that authors be keenly alert to issues of language usage and follow conventional grammar standards. Articles with numerous writing errors, especially those that impede the reader’s understanding, will probably be rejected or returned to the author for substantial revisions. A number of studies over the past 30 years have examined the reasons for article rejection, and they have remained relatively stable over time. For example, in 1985, Richard Davis surveyed 87 editors of engineering and science journals and reported that “ineffective expression” (p. 34) was chief among rejection rationales [11]. Eleven years later, Henderson and Reichenstein, in a similar survey, concluded that “poor organization, poor writing” (p. 65) resulted in rejection [12]. And in 2010, Miller et al. identified “poor paper organization and presentation” (p. 21) as a major reason for rejection as ranked by 40 engineering journal editors [13].

Non-native speakers writing for English-language publications need to be especially conscious of language usage. The following excerpt is a passage from a manuscript that was returned to the author for language issues:

Although the technological development in the industry is to develop a synchronized and integrated with technologies from other industries, but the technology developed by the industry as part of other technologies are used. Therefore, in order to access and use of technologies and companies in other industries and use their knowledge of technology and other industries are forced to organize broad strategic relationships with another industries. So there’s strategic relationships and exchange knowledge and technology in the innovation process and is not a choice but to develop new technologies is one of the requirements.

As this example illustrates, the author may have a viable idea, but substandard English obscures meaning. The excerpt displays issues with punctuation; inappropriate use (or lack of) of articles, especially “the”; stand-alone adjectives, unconnected to nouns; and generally awkward sentence structure. All of this results in an unclear message regarding the purpose of the paper, vital information that should appear in the beginning for reader orientation.

Peer review literature also identifies questionable writing as a frequent reason for article rejection. Pearson, discussing articles rejected for a medical journal, notes that the direct approach in composition is preferable to affectatious phrasing, overuse of acronyms, and
excessive technical jargon: “say what you mean, mean what you say, and don’t use big words” (p. 1249) [14]. Peter Thrower, editor-in-chief of a technical journal, writes in Elsevier’s “Publishing Tips” that language is often a reason for returning papers to authors before the peer review stage: “The language, structure, or figures are so poor that the merit can’t be assessed. Have a native English speaker read the paper. Even if you ARE a native English speaker” [15].

Indeed, non-native speakers of English are at a distinct disadvantage when writing for English-language publications: not only do they have to contend with intricate technical matters but also the onerous task of communicating that information in a foreign language. Finnish educator C. B. Norris offers several useful tips:

1. Avoid the temptation to directly translate sentences written in the author’s native tongue to English, as “the result will be awkward, unclear, and full of errors.”

2. Strive for clarity and accept responsibility for it; readers should be able to grasp meaning on a first reading.

3. Avoid ambiguity by using precise diction.

4. Edit text for clarity and hence a better opportunity for acceptance.

5. Read text aloud, as this practice will acclimate authors to the nuances of language and help them to identify awkward phrases.

6. Accept the fact that “English is not logical” and adapt accordingly (pp. 3-4) [16].

Ethical Considerations

Adherence to established principles of academic integrity is essential to the publishing enterprise. Items such as trust—between editors and authors, authors and source materials—are crucial in establishing credibility of individual authors and their written work. To this end, authors should familiarize themselves with policies regarding copyright and academic integrity, typically located on the journal’s website.

Copyright

When a journal editor accepts a manuscript, a condition for publication typically involves a copyright transfer, by which the author gives ownership of the manuscript to the publisher. ASEE’s copyright transfer, for example, states, “The undersigned, desiring to publish the above paper in a publication of ASEE or cosponsored by ASEE, hereby transfers their copyrights in the above paper to the American Society for Engineering Education, known as ASEE” [17].

An author desiring to use small portions of that paper in another context should treat it as any other source material, using quotation marks, if repeating material verbatim, and citing the
source. Authors seeking to republish an entire article in another journal or submit a published conference paper to a journal must first obtain permissions from the original publisher. Not doing so may constitute copyright infringement. At the very least, it is duplicate publication, a practice generally frowned upon. In addition to violating copyright, duplicate publication constitutes an ethical transgression because, as Ashmita Das notes, it “could distort empirical evidence,” waste editorial time and resources, occupy “limited/competitive journal space,” and signify “poor scholarship.” This includes translations of articles into other languages [18].

Experienced authors should note that this marks a change from past practice. Prior to 1990 [19], it was common to “tidy up” a conference paper for submission to a professional journal. Since then, republishing conference papers is considered as “self-plagiarism,” or text recycling, and is a cause of significant concern among journal editors [20] and professional organizations. In fact, several now include warnings about self-plagiarism [21]; the IEEE, for example, flatly states that it is “unacceptable” [22]. The same is true of publishing several similar articles based on the same study, a practice known as “salami slicing” [23]. Both of these techniques are recognized by plagiarism detection software, now in use by more than 250 publishers; numerous positive matches will probably result in article rejection [24].

All printed or recorded works in the United States are automatically protected by copyright law, including Internet items. Scholars may use a portion of written material without seeking permissions. For example, quoting short passages from a published book is allowable under copyright law, but if an author quotes a chapter or an entire work, permission is required [25].

Graphic images, both printed and online, are also protected by copyright, and allowable usage differs from text. According to US copyright law, images include “two-dimensional and three-dimensional works of fine, graphic, and applied art, photographs, prints and art reproductions, maps, globes, charts, diagrams, models, and technical drawings, including architectural plans” [25]. Using complete or adapted images requires permissions, since, unlike text, the entire image is typically reprinted. Citations must include words similar to “reprinted with permission from [copyright holder].”

Authors who are uncertain whether or not to pursue permissions should err on the side of caution and contact the appropriate persons or entities. Works in the public domain are no longer protected by copyright and do not require permissions.

*Academic Integrity*

Journal editors expect originality in content, and, as mentioned above, many publishers currently use detection software to ensure that submitted manuscripts adhere to academic integrity standards. This type of software searches large databases for matching text. While these programs are certainly not foolproof and require an editorial eye, a finding of 70% matching text could indicate that the submission has already been published elsewhere or that
the author is engaging in professionally undesirable behavior. At the very least, an editor will require a significant revision.

For academic integrity policies, authors should consult the websites of professional journals or the societies responsible for publications. The IEEE, for example, has a very detailed policy that includes variable sanctions, depending on the severity of the infraction. For an article containing fabricated data or 50% or more matching text, which includes materials re-used from an author’s prior publications, sanctions include publishing a notice that the author has violated IEEE’s Publication Principles, expunging the article from the database, and not considering manuscripts from the author for a period of three to five years, as per committee recommendation [26].

**Interactions with Editors**

Correspondence between authors and members of the editorial staff—manuscript, associate, section, or technical editors—is common throughout the publication process, which, depending on the number of review iterations, may be rather lengthy.

**Understanding the Review Process**

Authors may become impatient with the amount of time involved in the peer review process. Figure 1 shows a typical cycle. It is important for authors to recognize that the process is iterative and may take some time, depending on the number of revisions required. Correspondence with editorial staff may occur at any stage.

Upon receipt of a submission, the manuscript editor usually performs a desk review: checking for appropriate content and adherence to journal style. In addition, this editor may perform an originality check for matching text. Depending on the outcome, the editor will either return the manuscript to the author or send it to content reviewers for peer commentary. Although the number of reviewers varies from journal to journal, three is common. Peer reviewers usually have three to four weeks to perform their reviews; they may comment freely or follow a format prescribed by the journal. Several decisions are possible: accept as is (rare), return to author for minor or major revisions (most common), or reject. A “return to author” finding means that the writer has a chance to improve the article by incorporating peer reviewers’ suggestions. A finding of reject, however, is usually final, although some journals have an appeal process [27].

As a noteworthy aside, some open access, online journals—those deemed as “predatory”—promise very quick turn-around times, in some cases just a few days from submission to publication. While they claim to peer review submissions, many do not [28]. Real peer review takes time.
Figure 1: Journal Review Cycle

**Responding to Rejection**

Receiving a rejection notice is always a disappointment, whether authors are new to the publishing enterprise or are seasoned professionals. In addition to the decision, editors will forward reviewers’ comments, which are intended as constructive criticism, to help the author refashion the manuscript into a publishable article. New authors whose papers have
been rejected should seriously consider not appealing but instead focus energies on revising the manuscript according to reviewers’ comments [29].

Avoiding the temptation to bombard editors with excessive emails is essential, as this behavior can result in being labeled a “nuisance author.” A 2010 ethics case reported by the Committee on Publication Ethics (COPE) provides an apt example: An international author, whose paper was rejected, resorted to using email as a weapon, spamming the journal editor, researchers in his field, and governmental officials with “abusive” emails. In addition, he kept re-submitting his paper, changing his name and using different accounts. As a final coup de grâce, he sent out a counterfeit email, under the journal editor’s name and address, saying “If all Chinese authors are as impolite and narrow-minded as you, any contribution from China will be automatically rejected. So please stop this.” Responding to the mountain of emails the editor received in response was very time-consuming. Finally, the editor decided to simply ignore the author, resulting in a number of manuscripts sitting in the system and “messing with [the] journal’s statistics” [30].

While this may sound far-fetched, this author has received curious emails from some whose articles have been rejected. In one case, the writer, who had sent his manuscript to the wrong person during semester break, contacted the entire editorial board one week after submission to request reviewers’ comments. We responded that the review process takes several weeks and to please be patient. The author continued writing, addressing his very long and colorful emails to the whole board—89 in all. Finally, the manuscript editor wrote a definitive rejection letter because reviewers noted that the content of the article was not appropriate for the journal. Undaunted, the author’s response indicated his disagreement with that judgment: “I believe that I have a great paper as result and 100% sure that most of the researcher will refer this paper as base paper for their future research. In future it’s citation will be very high.”

Although confidentiality precludes reprinting the final email, Table 1 indicates the quirky formatting.

Obviously, this is not an appropriate mode of interacting with journal editors. And, while it may be psychologically cleansing for the author, such emails do not influence the editorial staff’s decision to reject the manuscript. If anything, the reverse occurs.
Table 1: Formatting in Author Email

<table>
<thead>
<tr>
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<td>Black</td>
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<td>Segoe UI</td>
<td>9.5</td>
<td>Red</td>
<td>Regular</td>
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Conclusions

Like other professional duties, writing a publishable article requires time on task and due diligence in ensuring accuracy and originality. And even with the most carefully written article, an author may face rejection. However, remembering that the craft of writing is similar to learning a musical instrument is helpful: each takes practice, and practice results in improvement.

Psychologist James Overholser has noted, “To remain productive in scholarly works, authors should gain a sense of meaning, enjoyment, accomplishment, and satisfy professional curiosity through the process” (p. 119) [31]. Ultimately, publishing in professional journals involves more than meeting requirements for promotion and tenure: it is a creative and intellectually fulfilling exercise, one that contributes to a sense of personal satisfaction and helps to create the knowledge of a profession.

References


Biography

MARILYN A. DYRUD is a full professor in the Communication Department at Oregon Institute of Technology, where she has taught for nearly 40 years. She has been active in engineering education for all of her career, including various leadership positions in the American Society for Engineering Education. She has authored more than 125 publications in peer-reviewed journals and conference proceedings and has given nearly 150 presentations. She also serves as a technical editor for IAJC publications and is the communications editor for the Journal of Engineering Technology. In addition, she is active in the Association for Business Communication and the Association for Practical and Professional Ethics.