

A Journal for all Geoscience Educators

The National Association of Geoscience Teachers is dedicated to the enhancement of teaching and learning at all academic levels. Commonly, the question is asked, "Why are there so few articles in the *Journal* dedicated K-12 education?" The answer is both simple and unfortunately unsatisfactory. The *Journal* can only publish a subset of those manuscripts submitted. It is the case that the number of papers received that focus on some aspect of post-secondary education far exceeds the number centered on teaching in the primary and secondary grades.

Since the answer to the above question is unsatisfactory, consider some of the reasons that explain the scarcity of manuscripts submitted by school teachers. First, and perhaps most importantly, publication is not an integral and essential part of K-12 teacher job expectations in the ways it is in the academic life of a post-secondary educator. Since peer-reviewed publication is not required or rewarded by school system administrators there is no incentive for teachers to extend the intense effort preparing a manuscript for publication demands. Second, school teachers are unfamiliar with and often intimidated by the peer-review process. Since the demands of publication are not part of the culture of primary and secondary teachers, there is a general lack of understanding of the way in which a manuscript is transformed from an idea held by a writer to a published article. Recognizing this as a problem for first-time authors, I will use this space to describe the review process used by the *Journal*. Third, there is a general misperception among some teachers that they do not have anything significant or relevant to contribute. To counter this, I will also describe below some of the areas where I believe teachers can make especially significant contributions to the ongoing conversation on enhancing teaching and learning at all levels.

The peer-review process used by the *Journal* of Geoscience Education is typical of any scientific publication. When a manuscript is received by the *Journal* office it is selected by or assigned to one of the Associate Editors listed immediately following the contents page. The Associate Editor then identifies two professional educators with experience and interest in the topic of the submitted paper. These individuals read and review the paper and return their comments to the Associate Editor who in turn writes a review of the paper as well as a summary of the external reviewers' comments. The reviews are then returned to the Editor for a final reading and rendering of the editorial

decision. A manuscript can receive any of five ratings: accept, accept with minor revision, accept with major revisions, reject, publish in another journal. Currently, the publication rate (after all revisions are made) is approximately 65% for submitted papers. The total rate is somewhat inflated by the acceptance of invited papers that become part of special issues. By far the most common result is acceptance pending major revisions. Occasionally, authors are invited to resubmit a manuscript if the revisions are substantial. I am proud of our review process. It is professional, as impartial as possible, and has significantly expanded the role of the greater geoscience community in controlling the content of our *Journal*. While the peer-review process can be frustrating and time consuming, it is the cornerstone of academic integrity so necessary for the advancement of our science.

Beyond the standard contributions concerning curriculum reform and advances in teaching techniques, there are a number of important areas where K-12 teachers can contribute to the community conversation. First, primary and secondary teachers have a long tradition of integrating a range of concepts into a single curriculum. As such, there is a wealth of experience in the strengths and weaknesses of implementing an Earth Systems approach in a survey course. Post-secondary educators could greatly benefit from the lessons learned by middle and high school Earth Science teachers. Second, K-12 teachers are far ahead of most of their post-secondary counterparts in the assessment of student learning. By providing examples of best practices, K-12 teachers can greatly benefit post-secondary educators as they struggle with the creation and implementation of assessment programs.

Recognizing the difficulties and roadblocks facing potential K-12 contributors, the *Journal* is committed to doing everything possible to bring relevant and well-considered manuscripts to publication. Authors are encouraged to contact the editorial office early in manuscript development for advice and guidance during the peer-review process.

Additionally, to recognize the significance of primary and secondary science education, I invite applications for an associate editor to help review papers dealing with K-12 content. This person will have the duty of encouraging submissions in this area, and facilitating the review of manuscripts.

Carl N. Drummond, Editor
