EDITORIAL

Search for a new editor

During the next few months the American Association of Physics Teachers (AAPT) will be searching for a second associate editor for the *American Journal of Physics* (AJP), who will become the new editor of AJP. The plan is that the new associate editor would start sometime between June 2011 and September 2011 and would continue as associate editor for about one year before becoming editor. During this transition period, the associate editor would be a half time position. However, the nature of the transition period is very flexible, and it is possible that the new associate editor would become editor sooner.

Why become the editor of AJP? One reason is that this position is very important, and the editor has a major impact. AJP serves the entire international physics community. It is one of the most readable and read journals in physics. Unlike research journals, AJP puts a premium on clarity of presentation and physical insight. Almost any physicist (and many other scientists as well) interested in physics education and obtaining a deeper understanding of physics will have read an AJP article, and many read AJP regularly.

What have I learned as editor over the past nine years? I am a much more broadly educated physicist than I was before becoming editor. Because I edit most manuscripts that are published, I have worked through the thinking of over a thousand physicists on topics covering every subfield of physics and many related fields. In some cases, I have worked through in detail manuscripts that I either found particularly interesting or that were controversial. When reviewers disagree, I sometimes find it necessary to clarify their positions so that the reviewers can clearly see the issues and avoid talking past each other. To do so, I have to dig deeply into the topic and understand the issues myself. I would like to do this even more, but there is not enough time. Even though I may not use many of the articles in AJP explicitly in my teaching, my appreciation for the subtlety of physics concepts and my understanding of how to do physics has increased enormously. In addition, because I am privy to all the reviews and correspondence between the reviewers and authors, I have a unique understanding of how physicists from Nobel prize winners to undergraduate students think about the subject and how to teach it. Sometimes the most interesting debates never make it into the articles, but have enriched my understanding. I have also obtained an "electronic intimacy" with many physicists, thus greatly broadening my network of colleagues.

How difficult is the job? I can't hide the fact that it is difficult! There are many things to do, and many skills are needed that are not commonly found in a single person. You must be a good physicist who has done a lot of college teaching, preferably including some graduate level teaching. You need to have a reasonable research record, and you must enjoy writing. You need to be hard nosed and willing to make difficult and sometimes unpopular decisions. You need to have a thick skin, as some authors will become very angry at you. Fortunately, these authors are few but they demand of you a great deal of emotional energy. I am pretty easygoing, and before becoming editor I was not known for making lots of decisions. My natural inclination is to let others make everyday decisions because I have few strong preferences. However, as editor I must make a decision on every submission. Fortunately, most reviewers provide good advice, and if you choose your advisory board, section editors, and consulting editors well, then you will have much expertise to draw upon. I could not do my job well without this input from so many trusted colleagues.

The editorial process is totally electronic. It can be done anywhere where there is an internet connection. New submissions are accepted only through our web based submission software. Reviews and resubmissions and all other correspondence come in through the web and email. We currently use EDITORIAL EXPRESS for almost all our editorial functions. Email templates are stored on this software. Reviewers and authors enter their contact information directly through EDITORIAL EXPRESS. Reminders are automatically sent to reviewers, and the software contains an easy to use searchable database. Although I sometimes feel like there are too many clicks needed to achieve a certain result, I realize that it is probably necessary to balance the demands of accuracy, security, confidentiality, accessibility, and flexibility.

The software we use is efficient and cost effective. The procedures we now use were developed from a homegrown electronic database that we developed about ten years ago and then modified to use EDITORIAL EXPRESS. Three years ago, John Mallinckrodt, who was acting editor while I was interim provost of Kalamazoo College, did a wonderful job in moving us to EDITORIAL EXPRESS. Along with support from Professor John Rust at EDITORIAL EXPRESS, we continue to make improvements. I do not have an administrative assistant because there would be only a few hours per week of work for such a person, and it would not reduce my workload very much. A new editor might have a different way of doing things.

AJP receives an eclectic assortment of manuscripts. Some are directly related to teaching, some concern research on how students learn and how we can teach them better, some discuss the history of physics, many provide new ways of thinking about topics in physics, some discuss new experiments for physics teaching laboratories, a few make contemporary research accessible to a broader audience, and some make connections between physics and other fields. All of

these articles are valuable. I am concerned that too many manuscripts are narrowly focused so that their accessibility is limited.

Although a large part of the editorial process consists of determining which manuscripts to publish, an even larger and growing part is editing manuscripts. Reviewers frequently help by pointing out the problems present in manuscripts. There are grammatical errors, typos, awkward constructions, various versions of improper English from nonnative (and sometimes native) speakers, inappropriate formatting, poor or nonstandard notation, incorrect word choice, a misunderstanding of the audience, and frequently poor organization. As editors, Harvey Gould and I are constantly asking authors to provide more insight. The most common problem is that authors think the audience knows as much as they do. As editors, we are performing an important service by helping authors improve their writing. Welcome to AJP 101.

The various tasks of the editor and associate editor can be distributed in different ways. At present, I do most of the work associated with choosing reviewers and deciding which manuscripts to publish and usually do only one limited round of editing of these manuscripts. The section editors (Physics Education Research, Apparatus and Demonstration Notes, Resource Letters, and Book Reviews) take on this role for their sections. As associate editor, Harvey Gould then does a more extensive edit. He is very good, and most authors are very grateful for the work that he does. Previous AJP editors have had a different distribution of roles, and the optimal distribution will depend on the specific skills of the editors.

When I became editor, one challenge was to convert AJP from a primarily paper operation to an exclusively electronic operation. I also had to plan for a larger online presence so that now the journal of record is the online version. We are presently working on making the online version even more powerful and useful. With the push for open access and the speed at which the world is becoming electronic, the new editor will face new and exciting challenges. The AJP of today might not look like the AJP of ten or even five years from now. It will be a great time for a new editor to strongly influence the future. (To see what past editors were thinking, see their editorials on becoming an editor in Refs. 1–3.)

Another responsibility as editor is to be an *ex officio* member of the Executive Board of AAPT and a member of the Publications Committee. These memberships give the editor the ability to contribute to the policy making of the most important organization in the world solely devoted to physics education. The editor attends the national meetings as well as business meetings in College Park, MD. You will meet the most involved and talented physics teachers at all levels and establish many close friendships with colleagues. Because AJP editors tend to serve longer than other Executive Board members, you will become one of the most knowledgeable members of the Board.

There is only one AJP editor at any one time. It is a unique and demanding position. AJP is an excellent journal. I hope I have helped to keep it that way, and I expect the next editor will do the same. I believe that ten years is about the limit to be effective as editor. In the beginning, you bring fresh ideas and new energy. After a few years, you become experienced and move the journal forward. But after a certain time, this cycle must be renewed. This time has come for me. I am glad I have been the editor of AJP, and it has been an honor to hold this position. The same will be true for the new editor.

The formal search for my successor is being organized by AAPT. Please check the AAPT webste (www.aapt.org) for details when they become available.

[1]Robert H. Romer, "Why not be editor?," Am. J. Phys. **68** (3), 209 (2000).
[2]John S. Rigden, "Editorial: The American Journal of Physics and its editor," Am. J. Phys. **55** (7), 587 (1987).
[3]Edwin F. Taylor, "Why not be editor?," Am. J. Phys. **45** (4), 323 (1977).

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