European Science Editing

Moving towards topical education in science editing

Current science publishing is increasingly dependent on emerging digital technologies. In times when boundaries between digital search engines, databases, libraries, and repositories are blurring, most publications face the challenge of adjusting their infrastructure to the requirements of the new world of communication. A single paper, but not a journal or a textbook, is becoming the main unit of information.1 A few digital mega-platforms such as BioMed Central are now capable of cascading unlimited numbers of papers. As a result, reviewing, editing, publishing, and archiving are gradually merging into one technological process.

To overcome limitations of the traditional peer review system, and particularly its slowness and bias, megaplatforms switch to the immediate publishing model with open post-publication review. One of the examples of this model was introduced by Faculty 1000°, a hub for comments and rated recommendations of around 5,000 scientists on papers from more than 3,500 biomedical journals. Another example of post-publication evaluation of papers is the correspondence model. This model was widely promoted by Prof Hasan Yazıcı, an eminent Turkish rheumatologist. He initially launched the Letter to Editor Rheumatology as a small journal for practical comments on recent papers in rheumatology and, in 2013, transformed it into a supplement for a mainstream journal - Clinical and Experimental Rheumatology.

To survive and compete with a large number of new journals, traditional sources must rely more on the skills of experts in information technologies. Information experts can facilitate indexing and archiving in repositories such as PubMed Central. Journal editors, in turn, can advance their skills in searching through databases to improve their practice and to follow updates in journal rankings.²

Science editors witness the global move towards virtual services and networks that has already transformed important areas of research. As an example, libraries are no longer limited in their capacity to offer services in a certain physical space. Modern librarians act as information skills facilitators, who select sources for their customers, share experience in statistics, and contribute as co-authors of systematic reviews.3 This form of collaboration follows the best pattern of creative team work, which materializes in the highest-impact science.4 Science editors can also position themselves as generators of new knowledge and boost research productivity. To achieve that, however, they have to complement their skills in journalism with those gained through the scientific research.

The generation of research-oriented editors is now in high demand because of the decades-long domination of the false concepts of 'authority and impact', which unjustifiably prioritized trendy papers by 'heavyweight' authors.^{5,6} The skewed perception of the journals' impact has led to the blind substitution of references to top-tier journals for scientific

evidence. While it is likely that a large proportion of the best papers accumulate in the highest-impact journals, it is also undeniable that the 'obsession' with these journals wastes authors' time and overburdens reviewers, who then cascade the same manuscripts in multiple journals. As a result of the 'impact obsession', the role of small professional communities has gradually diminished. Science journalism itself has become a subject of heavy criticism for the deluge of 'positive' research reports from 'elite' disciplines.5

Generally science editors strive to uphold ethical standards. Skills in ethical editing and publishing can be acquired through topical education at pre- and postgraduate courses. At the current stage, such courses are supported by learned associations. The European Association of Science Editors (EASE), for example, arranges meetings throughout Europe and elsewhere. Publication of EASE's revised and expanded edition of the Handbook for Science Editors in 2013 gives a major boost to those who seek a comprehensive reference on science editing. The European Science Editing journal, in its turn, has published many instructive papers in the past few years.

There is still much work to be done in the coming years. And we expect continuous support from our authors, reviewers, readers, and EASE membership.

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